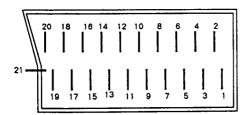
# KVM1420E

MODEL

### 21-pin Euro Connector Configuration



| PIN | SIGNAL                | SPECIFICATION             |
|-----|-----------------------|---------------------------|
| _ 1 | Audio output          | 0.5Vrms/1kilohm or less   |
| 2   | Audio input           | 0.5Vrms/10kilohms or more |
| 3   | Audio output          | 0.5Vrms/1kilohm or less   |
| 4   | Earth (audio)         |                           |
| 5   | Earth (B-input)       |                           |
| 6   | Audio input           | 0.5Vrms/10kilohms or more |
| 7   | B-input               | 0.7Vp-p/75ohms            |
| 8   | Function switching    | 9.5V to 12V               |
| 9   | Earth (G-input)       |                           |
| 10  |                       |                           |
| 11  | G-input               | 0.7Vp-p/75ohms            |
| 12  |                       |                           |
| 13  | Earth (R-input)       |                           |
| 14  | Earth (blanking)      |                           |
| 15  | R-input               | 0.7Vp-p/75ohms            |
| 16  | Fast blanking         | 1V to 3V/75ohms           |
| 17  | Earth (video)         |                           |
| 18  | Earth (fast blanking) |                           |
| 19  | Video output          | 1Vp−p/75ohms              |
| 20  | Video input           | 1Vp-p/75ohms              |
| 21  | Screening plug        |                           |

# SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY SHADING AND MARK 

① ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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# **SECTION 1 GENERAL**

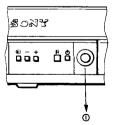
### 1-1. PRESETTING OF CHANNELS

After having installed the TV, you now need to preset TV channels. Up to 60 programme positions are at your disposal. For channel presetting use the buttons with the red symbols on the Remote Commander.

Important: In order to ensure presetting, you have to keep the \* (SHIFT) button pressed, while pressing the other buttons (that is  $\cdot \cdot \cdot \cdot \cdot \cdot + \cdot - \cdot \cdot \cdot \cdot \cdot \cdot = 0$ ) during presetting.

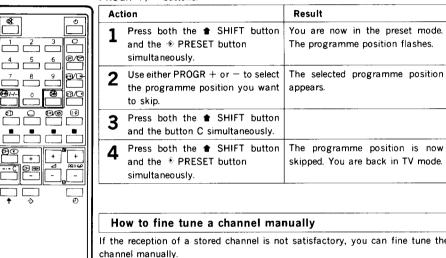
|                                      | Automatic Presetting of Cha |  |
|--------------------------------------|-----------------------------|--|
|                                      | Action                      |  |
| 4 5 6 <b>672</b><br>7 8 9 <b>634</b> | 1                           | Turn on the TV using the pov switch (1) on the set.  |
|                                      | 2                           | Press both the <b>1</b> (SHIFT) buttand the <b>3</b> PRESET button simultaneously.   |
|                                      | 3                           | Press either the number buttons PROGR +/- to select the p gramme number on which y want to preset the channel.  Note: In case of two digit nu bers, first press -/- then the two number. |
|                                      | 4                           | Press both the  SHIFT butt<br>and the + + or - butt<br>repeatedly, until the desired channel is tuned in.  |
| [₩                                   | 5                           | Repeat steps 3 and 4 for all oth channels.   |
| TRINITRON RM-694                     | 6                           | Press both the  SHIFT and the PRESET button simultaneously   |

| Αι   | Automatic Presetting of Channels   |   |  |  |  |
|--|--|---|--|--|--|
| Act  | tion   | Result  |  |  |  |
| 1  | Turn on the TV using the power switch $\cdots$ on the set.   |   |  |  |  |
| 2  | Press both the <b>1</b> (SHIFT) button and the <b>3</b> PRESET button simultaneously.  | You are now in the preset mode. The programme number flashes.     |  |  |  |
| 3  | Press either the number buttons or PROGR +/- to select the programme number on which you want to preset the channel.  Note: In case of two digit numbers, first press -/, then the two number. | The selected programme number will be indicated.                  |  |  |  |
| 4 Press both the ♠ SHIFT button and the ♠ + or — button changes.  repeatedly, until the desired channel is tuned in. |  |   |  |  |  |
| 5  | Repeat steps 3 and 4 for all other channels.   |   |  |  |  |
| PRESET button simultaneously to The programme  |  | All channels are now stored. The programme number stops flashing. |  |  |  |



### How to skip programme positions

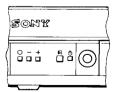
Since you have 60 programme positions at your disposal, you may want to skip vacant programme positions, that is that they are skipped when you press the PROGR +/- buttons.



If the reception of a stored channel is not satisfactory, you can fine tune the

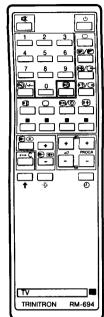
| Action  | Result                     |
|---|----------------------------|
| Press both the ★ SHIFT button and the ★ + or − button simultaneously until the reception is good. | The channel is fine tuned. |

Note: By pressing the respective programme number the automatic fine tuning will be restored.



TRINITRON RM-694

For the basic functions, however, it is also possible to use the buttons on the set.



 $\sigma$ 

| Но  | How to switch the TV on and off  |  |  |
|-----|--|--|--|
| Act | ion  | Result   |  |
| 1   | Press the power switch ① on the set.   | The TV will turn on.  Note: If the red indicator is on, the set is in standby mode.    |  |
| 2   | Press a number button on the Remote Commander, to select a programme.                        | The selected programme appears.  |  |
|     | In order to switch the set off temporarily: Press button $\bigcirc$ on the Remote Commander. | The set is in standby mode.  Press button  or any number button to switch it on again. |  |
|     | In order to switch the set off temporarily:  Press the power switch ① on the set.            | The set is switched off.   |  |

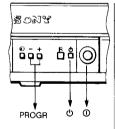
### Sleep Timer

Press the ① button repeatedly until the required time period is displayed on the screen (30, 60, 90 minutes or 0 for cancelling the request).

In this way you can select the time period after which the set switches itself automatically into standby-mode.

### How to select programmes

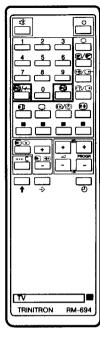
Before selecting programmes make sure that you have preset channels.



| Action |   | Result |           |    |      |
|--------|---|--------|-----------|----|------|
| 1      | Switch the TV on.   |        |           |    |      |
| 2      | Press PROGR +/- or the respective number button on the Remote Commander.  In case of two digit numbers first press the button -/ and then |        | programme | is | dis- |
|        | the two respective number buttons.  |        |           |    |      |

#### On the set:

Press the — button for lower programme positions and the + button for higher ones.



20033

مَ مَ مَ

| How to adjust the volume |  |  |
|--------------------------|--|--|
| Action                   | Result   |  |
| Press ∠ + or −.          | The symbol and the bar for the volume are displayed on the |  |
|                          | screem.  |  |
|                          | The volume is adjusted.                                    |  |

### On the set

Press  $\bigcirc$ , until the symbol  $\triangle$  is displayed on the screen, then adjust the volume by pressing the + or - buttons.

### Muting of the sound:

| Action           | Result                               |
|------------------|--------------------------------------|
| Press button ≫ . | The sound is switched off. Press the |
|                  | button again to restore the sound.   |

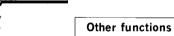
| Н             | How to adjust the picture   |  |  |
|---------------|---|--|--|
| Action Result |   |  |  |
| 1             | Press button repeatedly, until the desired item is displayed ( contrast, colour intensity, brightness). | The symbol and the respective bar display are displayed. |  |
| 2             | Press button + or   | The selected picture item is adjusted.                   |  |

### On the set:

Press button repeatedly in order to select the desired item, then adjust with  $\frac{1}{2}$  the  $\frac{1}{2}$  the  $\frac{1}{2}$  the  $\frac{1}{2}$  button.

### To return to factory-set levels

Press the button  $\rightarrow \cdot \leftarrow$ .



### On-screen display

Press the button  $\bigcirc$  to display the programme number on the screen and press the button a second time to make it disappear.

### Selecting the signal of a connected device.

Press the button to receive the signal of the device (e.g. a VTR) connected at the V  $\sqcup$  4 A connectors (front of the set), the S-Video input or the 21-pin connetor (rear of the set). Press the button  $\sqcup$  to return to the TV mode.

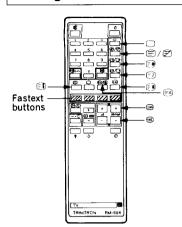
### On the set:

Press button e so that the symbols o, +, and + will be displayed. Press the + button to select the video input mode. Press e and + buttons a second time to return to the TV mode.

### Time function

Press (5) to display the time. Press button again to cancel the request (only if teletext is broadcast).

### **Viewing Teletext**



To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green. Select the TV channel for the desired teletext service. If the signal is weak, teletext errors can occur.

### To receive the teletext service of a different TV channel

- 1. Press to return to the TV mode.
- 2. Select the desired TV channel.
- 3. Press 🗐 / ② (TEXT/MIX).

Press ∩/⊘ (TEXT/MIX) to display the teletext service.

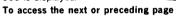
Key in three digits of the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then, re-enter the correct page number.

The requested teletext page is displayed. To return to TV mode press  $\bigcirc$  on the Remote Commander.

### **Teletext Functions**

### To request Index Page

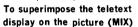
Press ( ) (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.



Press

Ó

(PAGE+) or (PAGE-)



Press ☐ / Ø twice from the TV mode. Press again to return to the TEXT display.

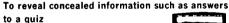
To prevent the Teletext page from being updated/changed

Press ⊕ (HOLD). The HOLD symbol appears on the screen.

To resume normal teletext reception (press ⊜ / ② (TEXT/MIX)).



Press Uponce to enlarge the upper half of the display; (press again to enlarge the lower half of the display. And press again to return to the normal display).



world weather

Press (B(REVEAL).

Press again to conceal the answers.

To watch the TV programme while

To view this page, press = / 🗈

waiting for a requested page to be displayed

1. Request the new page.

2. Press A to watch the TV programme. The requested page number and other data appear at the top of the screen. When the requested page has been captured, the page number is displayed in the top left hand corner of the screen.

### Fastext Operation

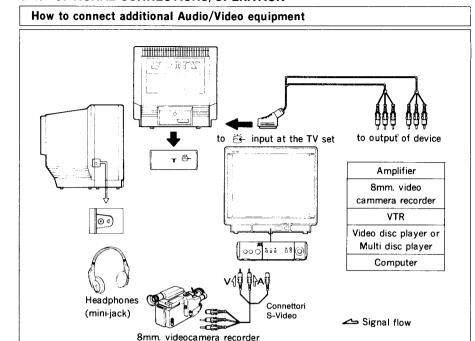
FASTEXT teletext enables you to access pages quickly and conveniently with one key operation. When a FASTEXT page is broadcast a colour coded menu will appear at the bottom of the screen. Each coloured prompt relates to the coloured keys on the Remote Commander. Pressing one of these will select the page described by the prompt.

Selection may also be made by entering the three digit page number in the normal way.

Correct FASTEXT operation relies on the necessary signals being transmitted by the Broadcastig Authorities. It is possible that some Broadcasters will not support this transmission.

If FASTEXT is not transmitted, the decoder will operate as outlined above.

### 1-4. OPTIONAL CONNECTIONS/OPERATION



### How to view the Video input signal

Press button ⊕ repeatedly in order to select the desired input mode (⊕ for Audio/video signals from 21-pin EURO connector or from the video/audio connectors V → A on the front). Press button □ to return to TV mode.

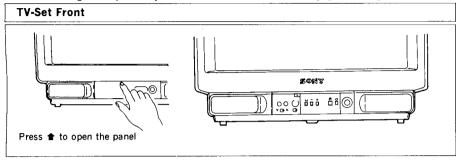
### On the set:

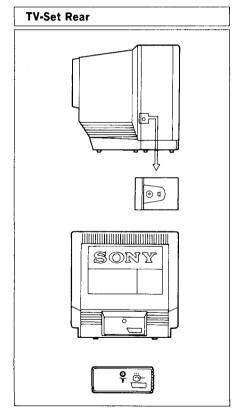
Press button (□-) until the symbols □, ⊕, appear on the screen, then press the + or - buttons to select the desired video input mode. Press (□-) again to return to TV-mode.

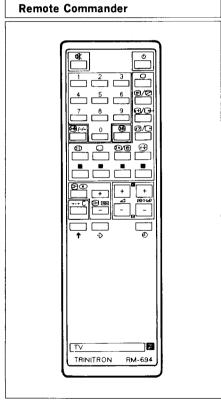
#### Notes

- When you have Audio/video equipment connected to both the A/V connectors and the 21-pin terminal, make sure that not both are swiched on at the same time, otherwise the picture could be incomplete.
- In case of sound or picture distortions move the VTR away from the TV set.

MC-Service







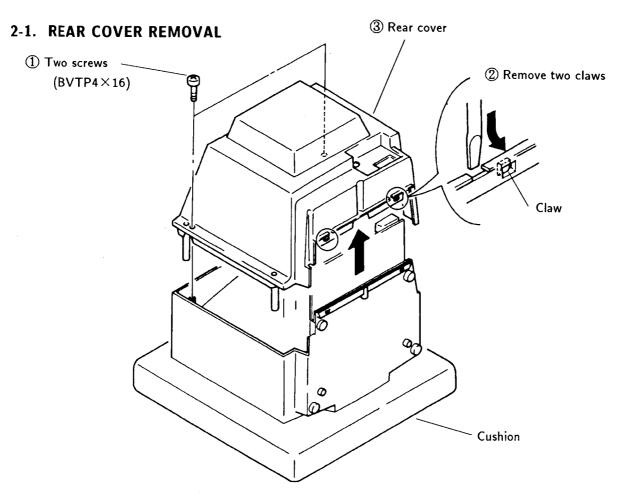
| TV set       |  |  |
|--------------|--|--|
| Symbol       | Function                                 |  |
| đ            | Headphones jack (mini-jack)              |  |
| V <b>⊙</b> - | Video input jack                         |  |
| A 😉          | Audio input jack                         |  |
| # +/-        | Buttons for sound and picture adjustment |  |
| +/-          | Programme scanning buttons               |  |
| P            | Remote control detector                  |  |
| Ф            | Standby indicator                        |  |
| 0            | Power switch                             |  |
| ٦٢           | Aerial socket (rear of the set)          |  |
| Ö-           | 21-pin connector (rear of the set)       |  |

| Remote Commander   |  |  |
|--------------------|--|--|
| Symbol             | Function   |  |
| <b>X</b> X         | Mute button  |  |
| 1-9, 0,-/          | Number buttons — in case of two digit numbers first press button —/— and then two number buttons |  |
| •                  | Button has no function   |  |
| •                  | Select button for picture adjustment item  |  |
| +/-                | Buttons for adjusting picture items  |  |
| ♦ and ♣+/-         | Buttons for manual fine tuning of a channel / channel search                                     |  |
| -4 • 4**           | Button for resetting the picture adjustment items to standard                                    |  |
| <b>◆</b> and C     | Buttons for clearing a programme position (in preset mode)                                       |  |
| •                  | Functions only in combination with other buttons   |  |
| -•€ and ◆          | Preset mode on / off buttons   |  |
| O                  | Button for switching the TV set into standby mode  |  |
| 0                  | Used to return to TV-mode from standby and video input modes                                     |  |
| G                  | Button for selecting the video input modes   |  |
| 0                  | On/off button for on screen display  |  |
|                    | Time feature   |  |
| PROGR +/-          | Programme scanning buttons   |  |
| ⊿ +/-              | Buttons for adjusting the volume   |  |
| 0                  | Button for activating the sleep timer  |  |
| 6 6 / Z 8 6<br>6 6 | Teletext buttons   |  |
|                    | FASTEXT buttons  |  |

Note Buttons not referred to in this index have no function.

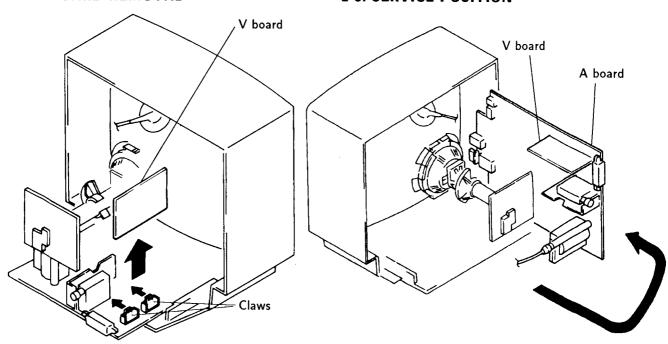
The green buttons are for Teletext.

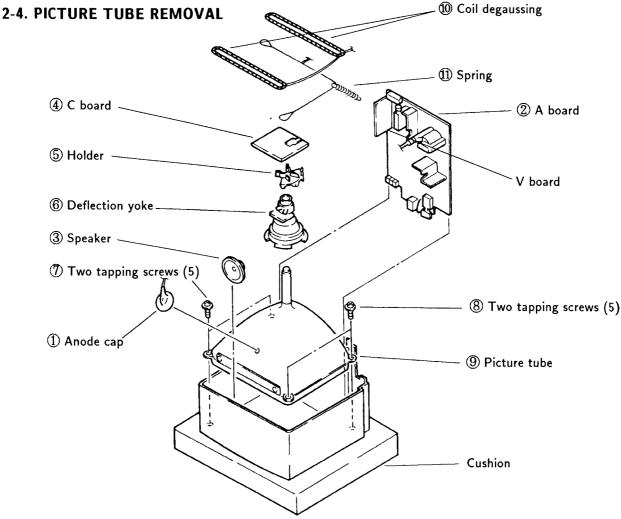
# SECTION 2 DISASSEMBLY



# 2-2. V BOARD REMOVAL

# 2-3. SERVICE POSITION

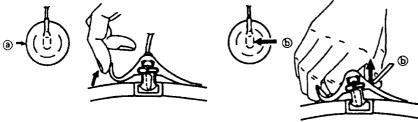




# REMOVAL OF ANODE-CAP

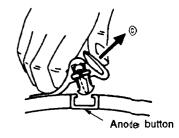
NOTE: Short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT chield or carbon painted on the CRT, after removing the anode.

### REMOVING PROCEDURES



① Turn up one side of the rubber cap in ② Using a thumb pull up the rubber cap the direction indicated by the arrow (a).

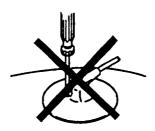
firmly in the direction indicated by the arrow (b).

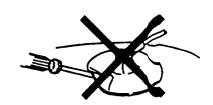


3 When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ©.

### · HOW TO HANDLE AN ANODE-CAP

- Don't hurt the surface of anode-caps with sharp shaped material!
- Don't press the rubber hardly not to hurt inside of anode-caps! A material fitting called as shatter-hook terminal is built in the rubber.
- Don't turn the foot of rubber over hardly! The shatter-hook terminal will stick out or hurt the rubber.





# SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- ◆ These adjustments should be performed with rated power supply voltage unless otherwise noted. The controls and switch below should be set as follows unless otherwise noted:
  - ◆ CONTRASTcontrol ······ 80%(or Normal by commander)

⇔ BRIGHTNESS control .... 50%

Perform the adjustments in order as follows:

- 1. Beam Landing
- 2. Convergence
- 3. Focus
- 4. Screen (G 2) and White Balance

Note: Test Equipment Required.

- 1. Color bar/Pattern Generator
- 2. Degausser
- 3. DC Power Supply
- 4. Digital multimeter
- 5. Oscilloscope

### Preparation:

- Set the side of the unit with the PICTUE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser..

### 3-1. BEAM LANDING

Demagnetize with a degausser

1. Input a raster signal with the pattern generator.

CONTRAST

CONTRAST
BRIGHTNESS } normal

- 2. Turn the raster signal of the pattern generator to red.
- 3. Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides evenly. (Fig.3-1 - 3-3)
- 4. Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig.3-1)
- 5. Switch over the raster signal to blue and blue and confirm the condition.
- 6. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- 7. When landing at the corner is not right, adjust by using the disk magnets. (Fig.3-4)

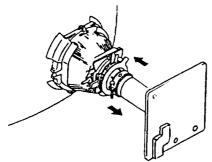


Fig.3-1

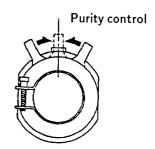


Fig.3-2

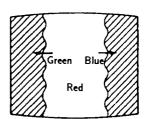
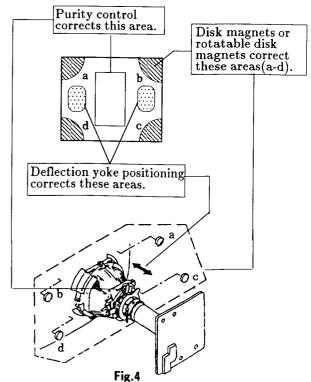


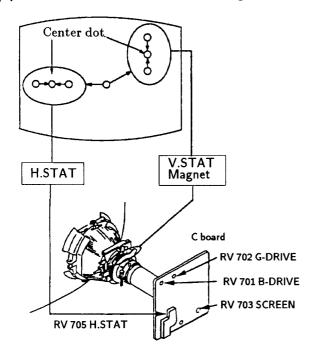
Fig.3-3



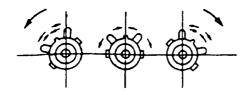
### 3-2. CONVERGENCE

### Preparation:

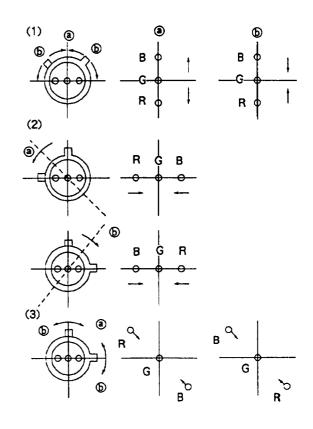
- Before starting, perform FOCUS, H.SIZE, and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.
- (1) Horizontal and Vertical Static Convergence



- 1. Adjust H.STAT VR to converge red, green and blue dots the in center of the screen. (Horizontal movement)
- 2. Adjust V. STAT magnet to converge red, green and blue dots in the center of the screen. (Vertical movement)
- 3. If the red, green and blue dots do not converge on the center of screen with H.STAT VR, perform horizontal convergence adjustment using H.STAT VR and V.STAT magnet as shown below. (In this case, H.STAT VR and V.STAT magnet effect each other.)
- Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.



4. When the V.STAT magnet is moved in the direction of arrow (a) and (b), red, green and blue dots move as shown below.

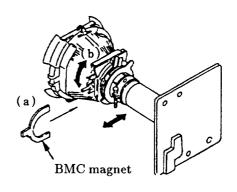


If the red and blue dot do not converge with green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H.static convergence.

Rotate BMC magnet (b) to correct insufficient V.static convergence.

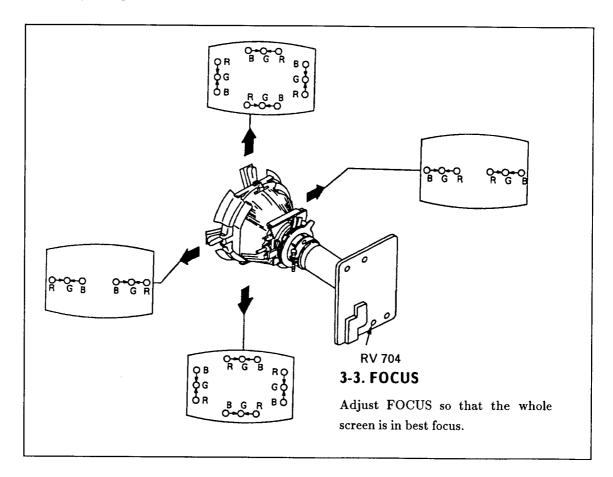
In either case, repeat Beam Landing Adjustment.



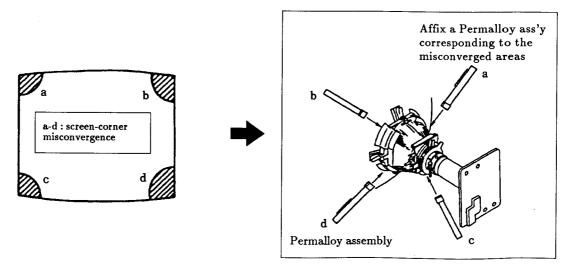
# (2) Dynamic Convergence Adjustment Preparation:

- Before starting perform Horizontal and Vertical static convergence Adjustment.
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.

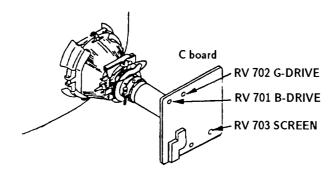
- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.



# (3) Screen-corner Convergence



# 3-4. SCREEN (G 2) and WHITE BALANCE



# Screen (G 2) Setting

- 1. Input dot signal from the pattern generator.
- 2. Set the picture BRIGHTNESS control to minimum level.
- 3. Apply 140 V DC to the cathodes of R,G and B from an external power power source.
- 4. While watching the picture, adjust the G 2 volume (RV703) immediately before fly-back line disappears.

### White Balance Adjustment

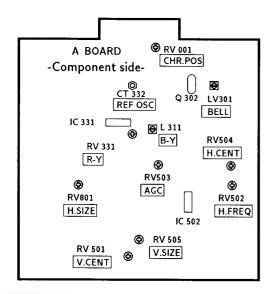
- 1. Input all-white signal from the pattern generator.
- 2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
- 3. Adjust the following using RV 701 (B DRIVE) and RV 702 (G DRIVE)

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

## **SECTION 4**

# **CIRCUIT ADJUSTMENTS**

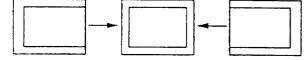
### 4-1. A BORAD ADJUSTMENTS



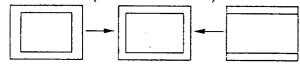
## TU AGC Adjustment (RV 503)

- 1. Tune in air signal.
- 2. Adjust AGC VR (RV 503) so that snow-noise and cross-modulation just disappear from the picture.

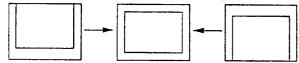
# **RV 504 H.CENT (HORIZONTAL CENTER)**



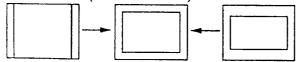
### **RV 801 H.SIZE (HORIZONTAL SIZE)**



### **RV 501 V.CENT (VERTICAL CENTER)**

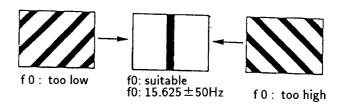


### **RV 505 V.SIZE (VERTICAL SIZE)**



# H.FREQ Adjustment (RV 502)

- 1. Input a PAL COLOR BAR signal, then connect an electrolytic capacitor (100  $\mu/16$  V) between pin and GND of IC 502.
- 2. Adjust RV 502 (H.FREQ) to stop scrolling of the picture in the horizontal direction.
- 3. After adjustment, remove the electrolytic capacitor.

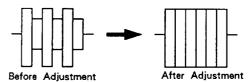


# REF OSC 8.8 MHz Adjustment (CT 332)

- 1. Input a PAL COLOR BAR pattern.
- 2. Short circuit between pin of IC 331 and ground.
- 3. Adjust CT 332 to obtain color synchronization.
- 4. Remove the jumper wire from IC 331.

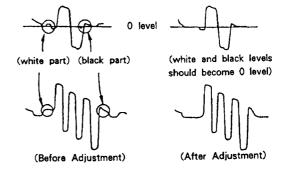
### BELL FILTER Adjustment (LV-301)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to rhe Q 302 emitter.
- 3. Adhust LV 301 so that waveform becomes flat.



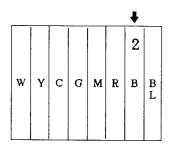
### SECAM DISCRI Adjustment (RV 331 R-Y L 331 B-Y)

- 1. Input a SECAM COLOR BAR pattern.
- 2. Connect an oscilloscope to pin ① of IC 301.
- 3. Adjust RV 331(R-Y) so that white and black parts of the waveform of pin ① becomes 0 lecel.
- 4. Connect an oscilloscope to pin ③ of IC 301.
- 5. Adjust L 331(B-Y) so that white and black parts of the waveform of pin 3 becomes 0 level.

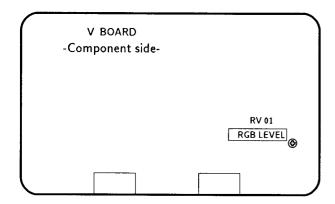


# CHARACTER POSITION Adjustment (RV 001)

- 1. Input PAL COLOR BAR pattern.
- 2. Adjust RV 001 to position the charcter display at the point indicated by the arrow below.



# 4-2. V BOARD ADJUSTMENT

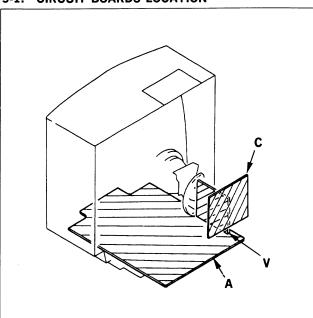


# RGB LEVEL Adjustment (RV 01)

- 1. Set PICTURE to maximum.
- 2. Adjust RV01 till the RGB output becomes maximum.

# SECTION 5 DIAGRAMS

### 5-1. CIRCUIT BOARDS LOCATION



Note: The components identified by shading and mark

A are critical for safety. Replace only with part number specified.

### Note:

- All capacitors are in  $\mu F$  unless otherwise noted, pF :  $\mu \mu F$  50WV or less are not indicated except for electrolytics.
- Indication of resistance, which does not have one for rating electrical power is as follows.

| Pitch                   | : 5mm  |
|-------------------------|--------|
| Rating electrical power | : 1/4W |

- Chip resistor is in 1/10W.
- All resistors are in ohms.  $k\Omega$ : 1000 $\Omega$ ,  $M\Omega$ : 1000 $k\Omega$ .
- m : nonflammable resistor.
- fusible resistor.
- panel designation and adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- All voltage are in V.
- $\bullet$  Readings are taken with a 10M  $\!\Omega$  digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- --- : B+ bu
- Signal path. (RF)

### Reference information

RESISTOR : RN METAL FILM : RC SOLID

: FPRD NONFLAMMABLE CARBON
: FUSE NONFLAMMABLE FUSIBLE
: RS NONFLAMMABLE WIREWOUNO
: RB NONFLAMMABLE CEMENT
: \* ADJUSTMENT RESISTOR

COIL : LF-8L MICRO INDUCTOR CAPACITOR : TA TANTALUM

: PS STYROL : PP POLYPROPYLENE : PT MYLAR

: MPS METALIZED POLYESTER : MPP METALIZED POLYPROPYLENE

: ALB BIPOLAR

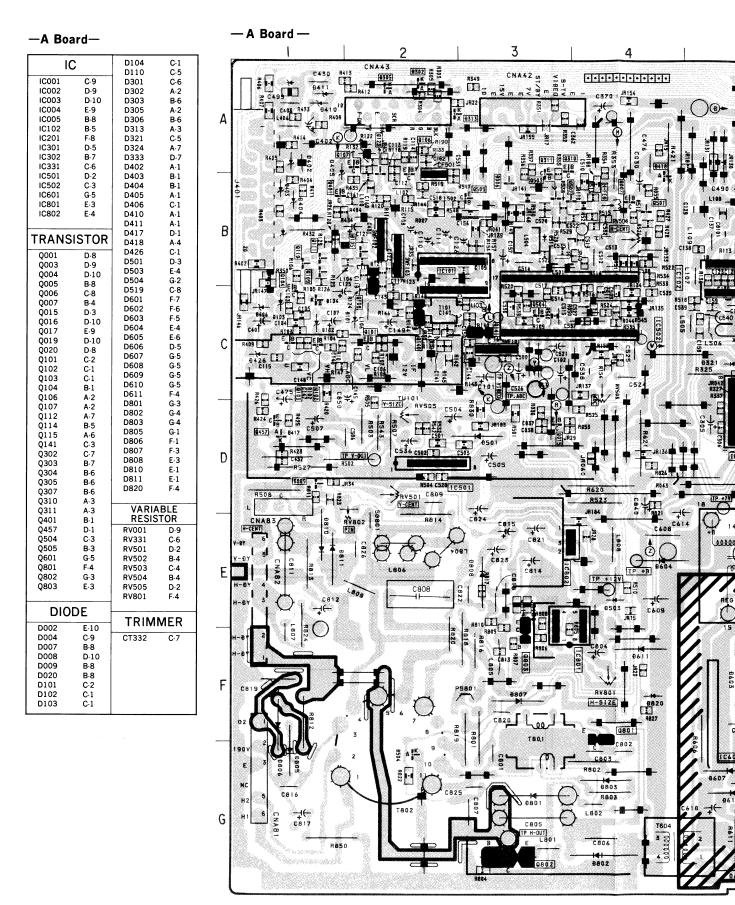
: ALT HIGH TEMPERATUNE

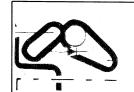
: ALR HIGH RIPPLE

SYSTEM CONTROL, A/V OUT, H/V OUT, MEMORY, CHROMA



### 5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS





# NOTE:

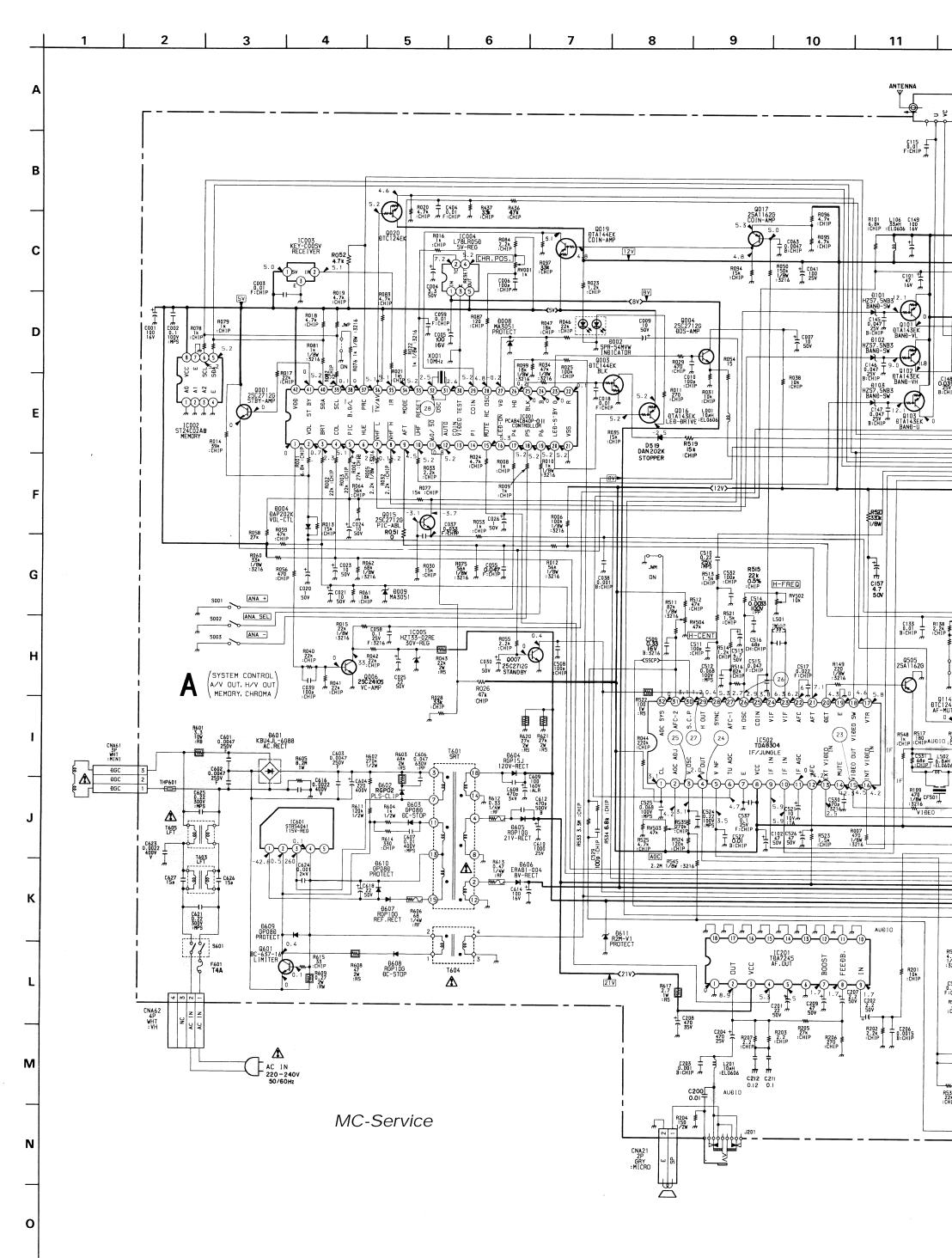
The circuit indicated as left contains high voltage of over 600 Vp-p. Care must be paid to prevent an electric shock in inspection or repairing.

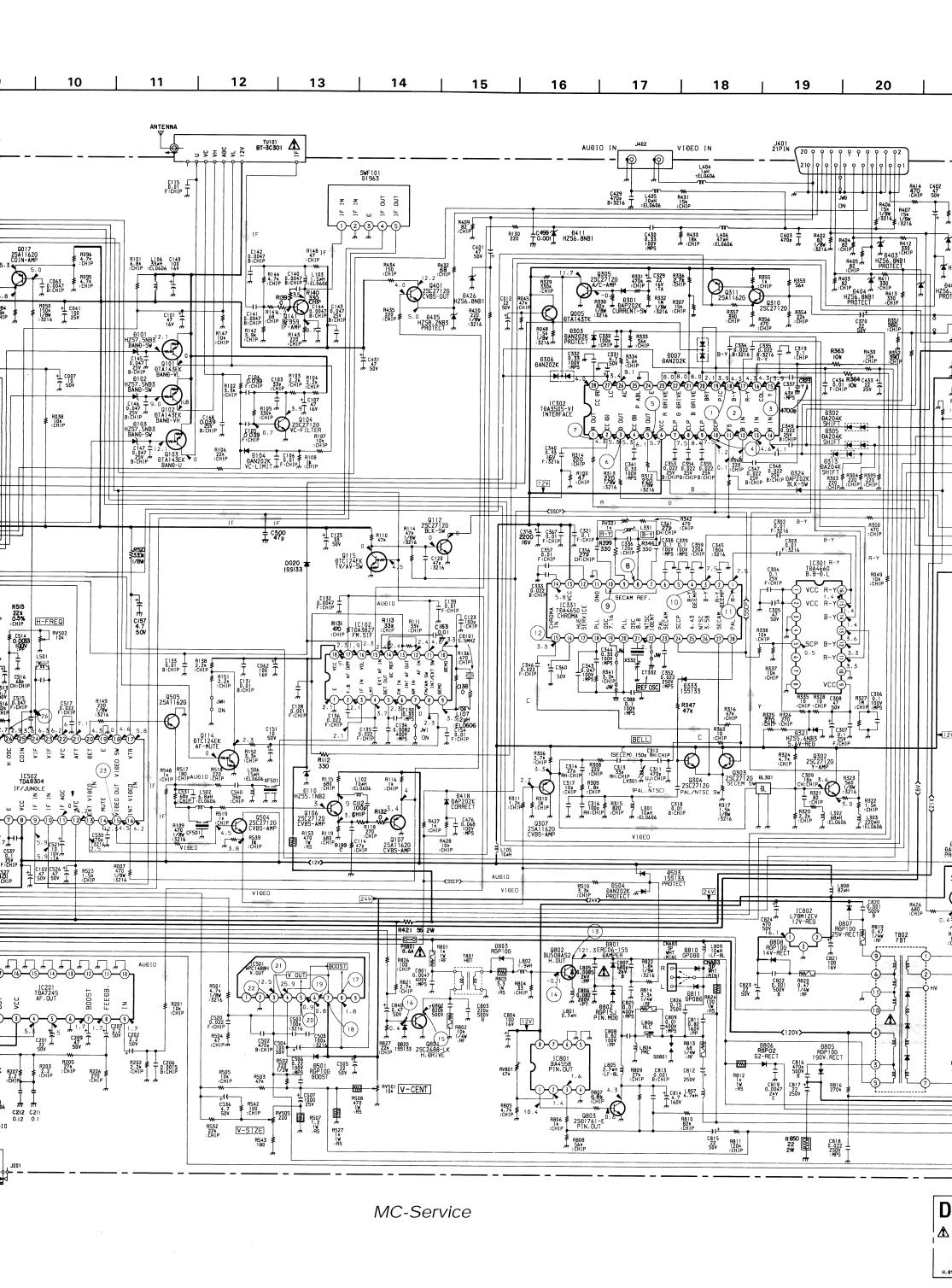
### 5-2. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

NOUNO

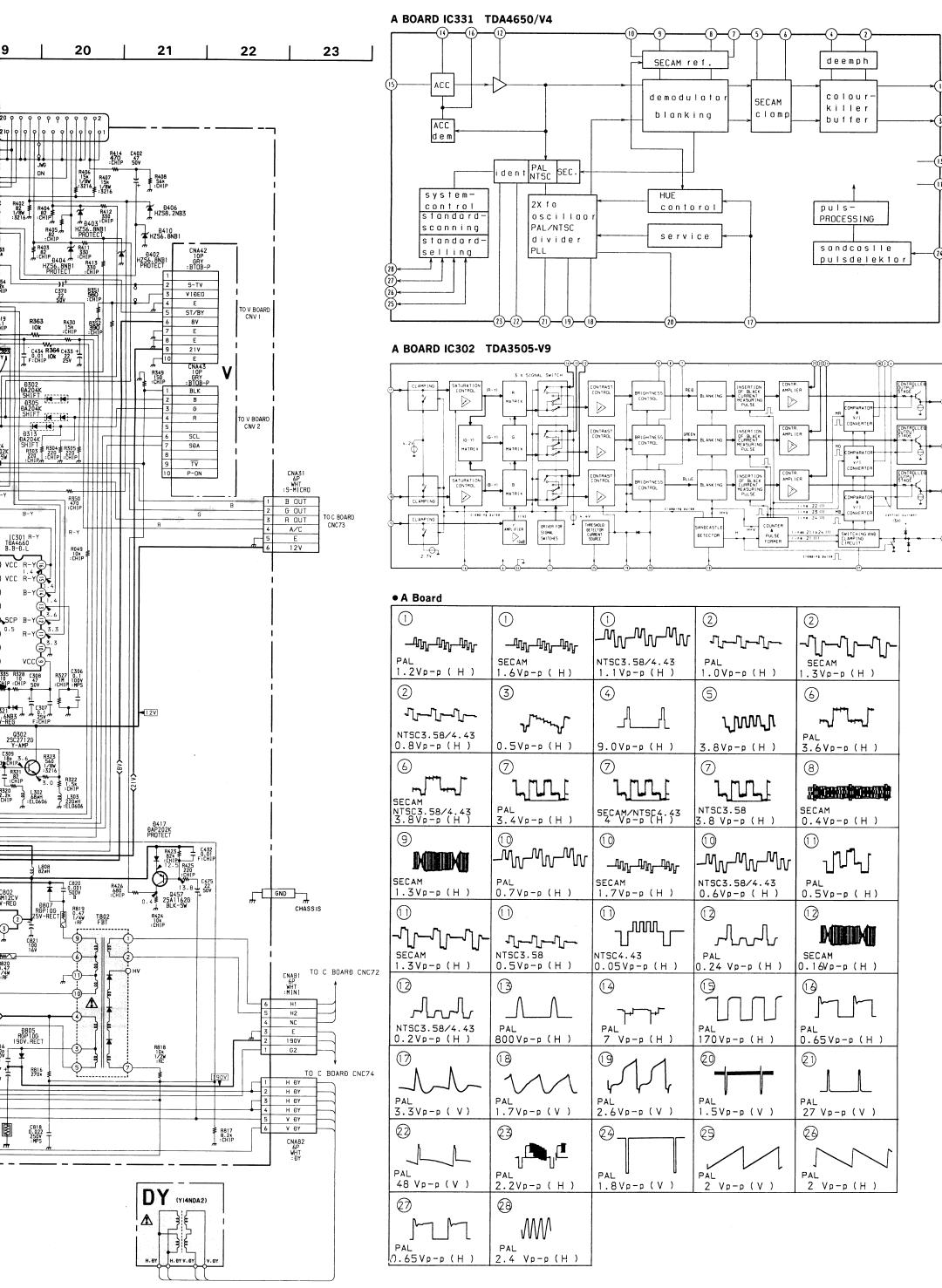
YLENE

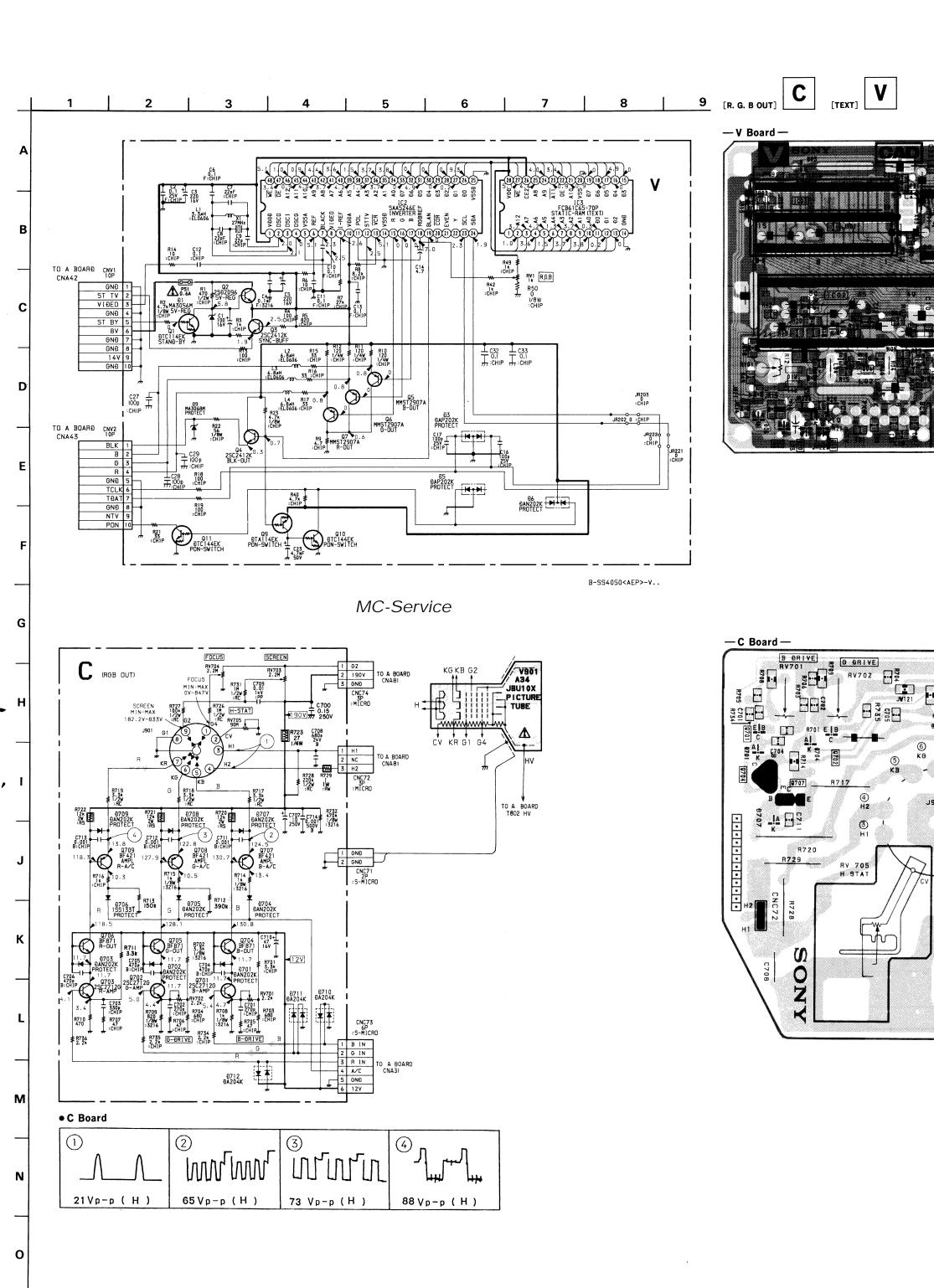
— A Board — -A Board-D104
D110
D301
D302
D303
D305
D306
D313
D321
D324
D333
D404
D405
D406
D410
D411
D417
D418
D426
D501
D602
D603
D504
D509
D601
D602
D603
D604
D605
D606
D607
D608
D609
D610
D801
D801
D801
D801
D801
D803
D806
D807
D808
D808
D808
D810
D811
D820 C-1 C-5 C-6 A-2 C-6 A-(1-703-761-14) 1-638-503-14 CNA42 u ------IC001 IC002 IC003 IC004 IC005 IC102 IC201 IC301 IC302 IC331 IC501 IC502 IC601 IC801 IC802 C-9 D-9 D-10 E-9 B-8 B-5 F-8 D-5 C-6 D-2 C-3 G-5 E-3 E-4 TRANSISTOR VARIABLE RESISTOR RV001 RV331 D-9 C-6 D-2 B-4 C-4 B-4 D-2 F-4 RV501 RV502 RV503 RV504 RV505 DIODE TRIMMER D002 D004 D007 D008 D009 D020 D101 D102 D103 E-10 C-9 B-8 D-10 B-8 C-2 C-1 C-1 CT332



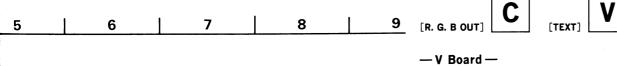


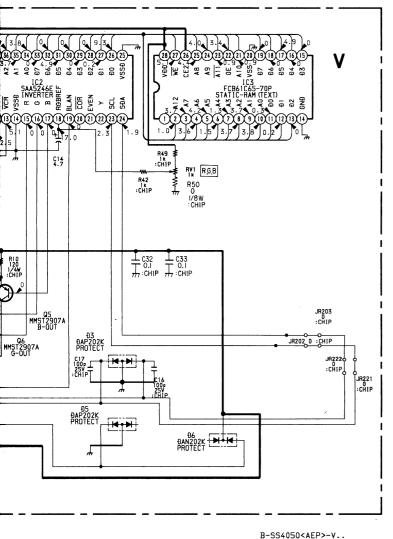
1-

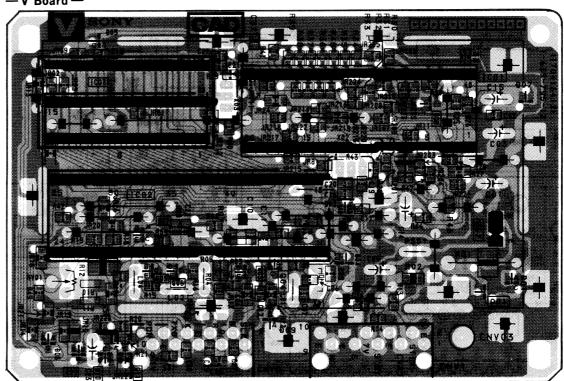




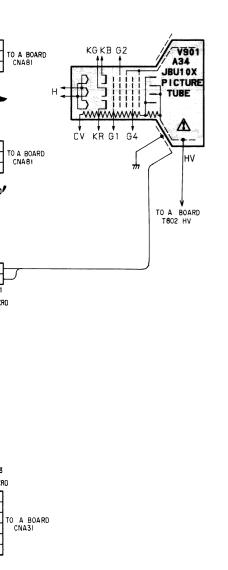
-23-

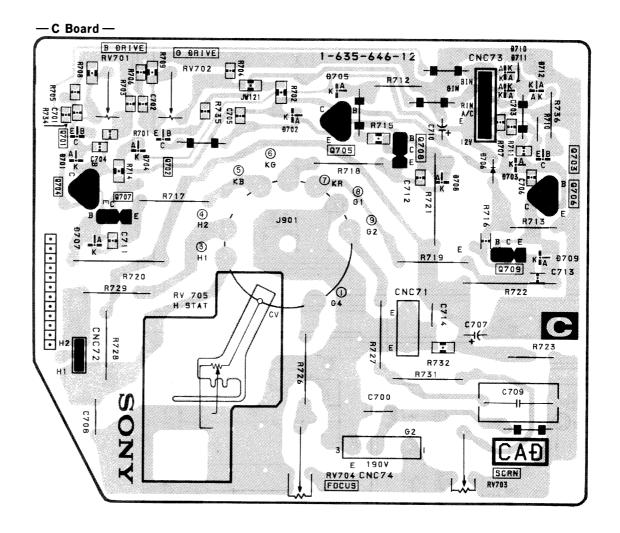


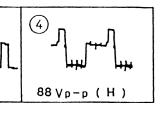


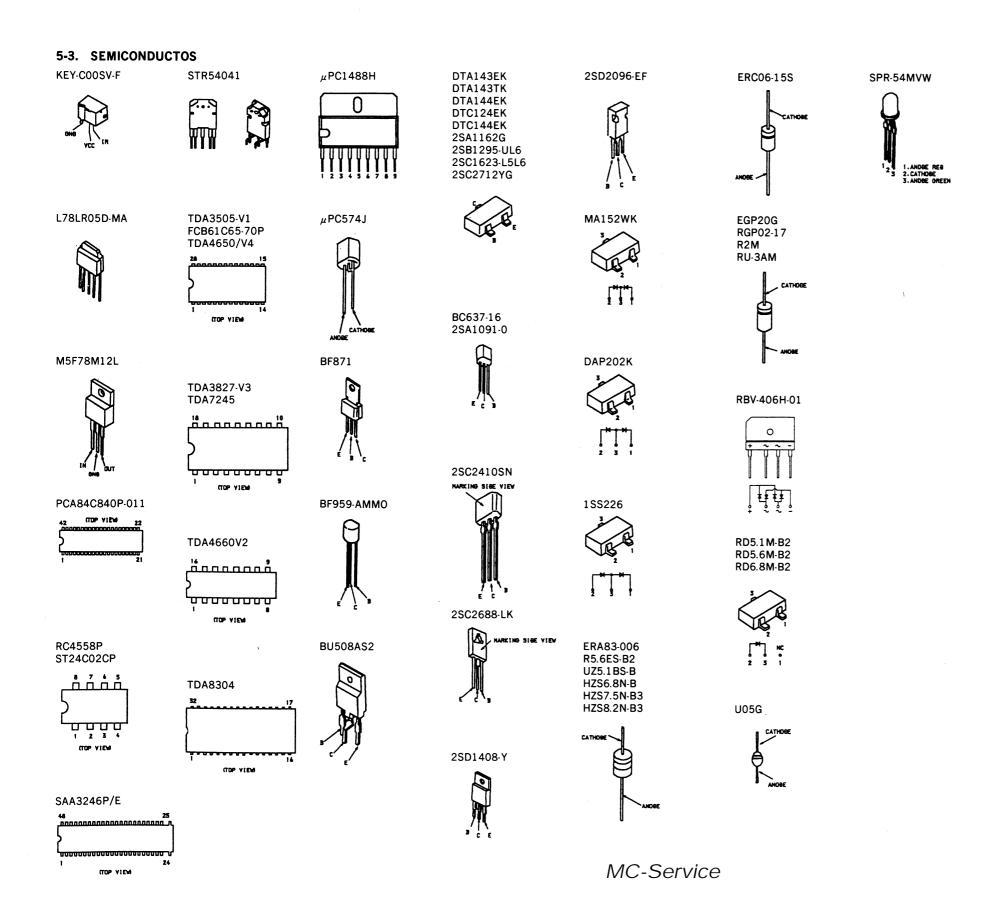


MC-Service





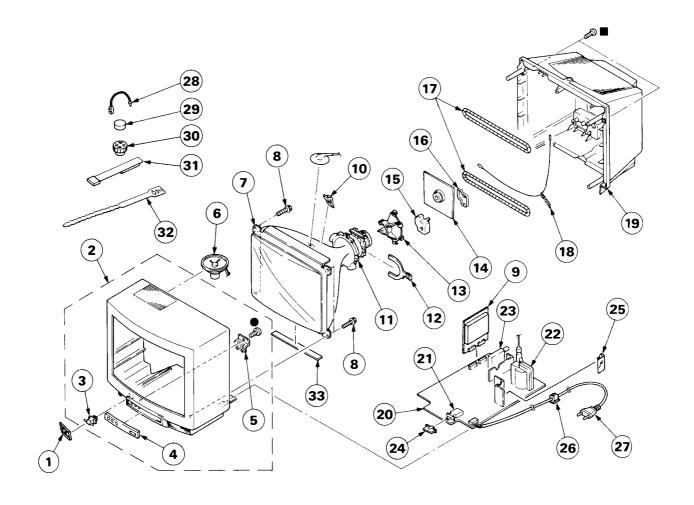




# **SECTION 6 EXPLODED VIEW**

- NOTE:
   Items with no part number and no description are not stocked because they are seldom required for routine service.
   The construction parts of an assembled part are indicated with a collation number in the remark column.
- ●: BVTP3×12 7-685-648-79 ■: BVTP4×16 7-685-663-79
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark A are critical for safety. Replace only with part number specified.



| REF. NO. PART NO. DESCRIPTION   | REMARK               | REF.NO.   | PART NO.                                     | DESCRIPTION   | REMARK |
|---|----------------------|---|--|---|--------|
| 1 4-200-403-11 LID, CONTROL (WHITE) 4-200-403-21 LID, CONTROL (BLACK) 2 X-4200-049-2 CABINET ASSY (WITH BEZEL ASSY) (WI X-4200-049-3 CABINET ASSY (WITH BEZEL ASSY) (BL 3 3-703-035-11 SHAFT, LID 4 4-200-406-01 WINDOW, ORNAMENTAL 5 4-200-405-01 BUTTON, MULTI 6 1-544-374-11 SPEAKER 7 Ab 8-735-555-75 PICTURE TUBE (A34JBUIOX) 8 4-307-249-00 SCREW (5), TAPPING 9 *A-1645-017-A V BOARD, COMPLETE 10 3-704-495-01 SPACER, DY 11 Ab 1-451-249-31 DEFLECTION YOKE (Y14NDA2) 12 1-452-277-00 MAGNET, BMC 13 *4-385-422-01 HOLDER, LEAD 14 *A-1638-008-A C BOARD, COMPLETE 15 *4-374-913-01 COVER (MAIN), CV VOL 16 *4-374-913-01 COVER (REAR LID), CV VOL 17 Ab 1-426-145-21 COIL, DEGAUSSING | ITE) 3~5<br>ACK) 3~5 | 20<br>21 <u>A</u><br>22 <u>A</u><br>23 <u>A</u><br>24<br>25<br>26 <u>A</u><br>27 <u>A</u><br>28 | 1-571-433-12<br>1-439-432-11<br>1-465-541-11 | COVER, REAR (BLACK) COVER, REAR (WHITE) A BOARD, COMPLETE SWITCH, PUSH (AC POWER) TRANSFORMER ASSY, FLYBACK (UX-16: TUNER (BT-3C 301) BUTTON, POWER PLATE, INSULATION HOLDER, AC CORD CORD, POWER (WITH NOISE FILTER) CLIP, LEAD WIRE MAGNET, DISK; 10MM & MAGNET, ROTATABLE DISK; 15MM & PERMALLOY ASSY, CONVERGENCE BAND, BINDING | 20)    |



# **SECTION 7 ELECTRICAL PARTS LIST**

- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless CAPACITORS MF :  $\mu F$ , PF :  $\mu F$ otherwise noted.

When indicating parts by reference number, please include the board name.

CAPACITORS

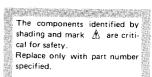
COILS • MMH : mH, UH : μH The components identified by shading and mark 🛕 are critical for safety. Replace only with part number specified.

# RESISTORS

All resistors are in ohms
 F: nonflammable

| REF.NO                               | D. PART NO.   | DESCRIPTION   |                                   | REMARK                           | REF.NO.                              | PART NO.   | DESCRIPTION  |                                 | REMARK                           |
|--------------------------------------|---|---|-----------------------------------|----------------------------------|--------------------------------------|--|--|---------------------------------|----------------------------------|
|                                      | *A-1632-072-A<br>*1-535-084-00  | A BOARD, COMPLETE   |                                   |                                  | C130<br>C131<br>C132<br>C133         | 1-164-232-11   | FILM 0.33MF<br>CERAMIC CHIP 0.01MF<br>CERAMIC CHIP 0.0047MF<br>CERAMIC CHIP 0.01MP                                       |                                 | 50V<br>50V<br>50V<br>50V         |
|                                      | 4-200-399-01<br>4-201-057-01<br>*4-341-751-01<br>*4-341-752-01  | SPACER, 1C<br>COVER, FUSE<br>EYELET<br>EYELET   |                                   |                                  | C134<br>C135<br>C136                 | 1-163-033-00<br>1-163-033-00   | MYLAR 0.0082MF<br>CERAMIC CHIP 0.022MF<br>CERAMIC CHIP 0.022MF<br>METAL GLAZE 0 5%                                       | 10%                             | 400V<br>50V<br>50V               |
|                                      | <cap< td=""><td>ACITOR&gt;</td><td></td><td></td><td>C139</td><td>1-164-232-11</td><td>CERAMIC CHIP 0.01MF</td><td>10%</td><td><b>50V</b></td></cap<> | ACITOR>   |                                   |                                  | C139                                 | 1-164-232-11   | CERAMIC CHIP 0.01MF  | 10%                             | <b>50V</b>                       |
| C001<br>C002<br>C003<br>C004<br>C005 | 1-126-101-11<br>1-106-220-00<br>1-163-031-11<br>1-123-382-00<br>1-126-101-11  | A BOARD, COMPLETE ***********************************   | 20%<br>10%<br>20%<br>20%          | 16V<br>100V<br>50V<br>50V<br>16V | C140<br>C141<br>C142<br>C143<br>C144 | 1-163-017-00<br>1-163-017-00<br>1-163-809-11                                 | CERAMIC CHIP 0.0047MF<br>CERAMIC CHIP 0.0047MF<br>CERAMIC CHIP 0.0047MF<br>CERAMIC CHIP 0.047MF<br>CERAMIC CHIP 0.0047MF | 10%<br>10%<br>10%<br>10%<br>10% | 50V<br>50V<br>50V<br>25V<br>50V  |
| C006<br>C007<br>C009<br>C010<br>C012 | 1-163-117-00<br>1-124-907-11<br>1-124-907-11<br>1-163-117-00<br>1-126-233-11  |   | 20%                               |                                  | C145<br>C146<br>C147<br>C148<br>C149 | 1-163-809-11   | CERAMIC CHIP 0.047MF CERAMIC CHIP 0.047MF CERAMIC CHIP 0.047MF CERAMIC CHIP 0.039MF ELECT 100MF                          | 10%<br>10%<br>10%<br>10%<br>20% | 25V<br>25V<br>25V<br>50V<br>16V  |
| C018<br>C020<br>C021<br>C023<br>C024 | 1-163-031-11<br>1-124-903-11<br>1-124-907-11<br>1-124-907-11<br>1-124-907-11  | CERAMIC CHIP 0.01MF<br>ELECT 1MF<br>ELECT 10MF<br>ELECT 10MF  | 20%<br>20%<br>20%<br>20%          | 50V<br>50V<br>50V<br>50V<br>50V  | C151<br>C154<br>C157<br>C163<br>C200 | 1-164-232-11<br>1-164-232-11   | CERAMIC CHIP 0.01MF ELECT 4.7MF CERAMIC CHIP 0.01MF CERAMIC CHIP 0.01MF  | 20%<br>10%<br>20%<br>10%<br>10% | 50V<br>50V<br>50V<br>50V<br>50V  |
| C025<br>C026<br>C030<br>C037<br>C038 | 1-126-233-11<br>1-124-903-11<br>1-124-903-11<br>1-163-034-00<br>1-163-009-11  | ELECT 22MF  | F                                 | 50V<br>50V<br>50V<br>50V<br>50V  | C201<br>C202<br>C203<br>C204<br>C206 | 1-124-480-11   | ELECT 2.2MF<br>CERAMIC CHIP 0.001MF  | 20%<br>20%<br>10%<br>20%<br>10% | 50V<br>50V<br>50V<br>25V<br>50V  |
| CO39<br>CO41<br>CO55<br>CO58<br>CO59 | 1-163-117-00<br>1-124-478-11<br>1-163-075-00<br>1-163-077-00<br>1-163-031-11  | CERAMIC CHIP 100PF<br>ELECT 100MF<br>CERAMIC CHIP 0.047P<br>CERAMIC CHIP 0.1MF<br>CERAMIC CHIP 0.01MF | 10%                               | 50V<br>25V<br>50V<br>25V<br>50V  | C207<br>C208<br>C209<br>C211<br>C212 | 1-124-925-11<br>1-126-104-11<br>1-124-910-11<br>1-163-077-00<br>1-164-348-11 | ELECT 47MF   | 20%<br>20%<br>20%<br>10%<br>10% | 50V<br>35V<br>50V<br>25V<br>25V  |
| C062<br>C063<br>C101<br>C102<br>C103 | 1-126-101-11<br>1-163-017-00<br>1-124-477-11<br>1-124-910-11<br>1-163-105-00  | CERAMIC CHIP 0.0047<br>ELECT 47MF   | 20%<br>MF 10%<br>20%<br>20%<br>5% | 16V<br>50V<br>16V<br>50V<br>50V  | C300<br>C302<br>C303<br>C304<br>C305 | 1-163-038-00<br>1-124-910-11   | CERAMIC CHIP 0.01MF<br>CERAMIC CHIP 0.1MF<br>ELECT 47MF  | 10%                             | 50V<br>50V<br>50V<br>25V<br>50V  |
| C104<br>C105<br>C106<br>C107<br>C112 | 1-164-665-11<br>1-164-665-11<br>1-163-031-11<br>1-124-477-11<br>1-163-117-00  | CERAMIC CHIP 0.039M<br>CERAMIC CHIP 0.039M<br>CERAMIC CHIP 0.01MF<br>ELECT 47MF                       | F 10%<br>F 10%                    | 50V<br>50V<br>50V<br>16V<br>50V  | C306<br>C307<br>C308<br>C309<br>C311 | 1-106-220-00<br>1-163-038-00<br>1-124-910-11<br>1-163-099-00<br>1-163-133-00 | MYLAR 0.1MF CERAMIC CHIP 0.1MF ELECT 47MF CERAMIC CHIP 18PF CERAMIC CHIP 470PF   | 10%<br>20%<br>5%<br>5%          | 100V<br>25V<br>50V<br>50V<br>50V |
| C114<br>C115<br>C120<br>C123<br>C125 | 1-163-109-00<br>1-163-031-11<br>1-163-173-00<br>1-163-117-00<br>1-124-917-11  | CERAMIC CHIP 47PF<br>CERAMIC CHIP 0.01MF<br>CERAMIC CHIP 47PF<br>CERAMIC CHIP 100PF<br>ELECT 33MF     | 5%<br>5%<br>5%<br>20%             | 50V<br>50V<br>50V<br>50V<br>50V  | C312<br>C313<br>C314<br>C316<br>C317 | 1-163-121-00<br>1-163-105-00<br>1-163-103-00<br>1-163-377-11<br>1-163-093-00 | CERAMIC CHIP 150PF CERAMIC CHIP 33PF CERAMIC CHIP 27PF CERAMIC CHIP 100PF CERAMIC CHIP 10PF                              | 5%<br>5%<br>5%<br>5%<br>5%      | 50V<br>50V<br>50V<br>50V<br>50V  |
| C128                                 |   | CERAMIC CHIP 0.001M   |                                   | 50V                              | C318<br>C319                         | 1-164-232-11<br>1-163-038-00   | CERAMIC CHIP 0.01MF<br>CERAMIC CHIP 0.1MF  | 10%                             | 50V<br>25V                       |

| REF.NO.                              | PART NO.   | DESCRIPTION   |   |                                | REMARK                           | REF.NO.                                      | PART NO.   | DESCRIPTION  |  |                                 | REMARK                                   |
|--------------------------------------|--|---|---|--------------------------------|----------------------------------|--|--|--|--|---------------------------------|--|
| C321<br>C323<br>C329<br>C330<br>C331 | 1-163-055-00<br>1-131-367-00<br>1-163-117-00<br>1-124-927-11                 | CERAMIC CHIP<br>ELECT<br>MYLAR  | 0.0047MF<br>22MF<br>130PF<br>4.7MF      | 10%<br>10%<br>5%<br>20%        | 25V<br>50V<br>16V<br>50V<br>50V  | C516<br>C517<br>C520<br>C521<br>C524<br>C525 | 1-163-113-00<br>1-163-033-00<br>1-163-033-00<br>1-131-377-00<br>1-106-228-00<br>1-106-216-00 | CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP<br>TANTALUM<br>MYLAR<br>MYLAR | 0.022MF  | 5%<br>10%<br>10%<br>10%         | 50V<br>50V<br>50V<br>10V<br>100V<br>100V |
| C333<br>C334<br>C335<br>C336         | 1-163-063-00<br>1-163-063-00<br>1-163-119-00<br>1-130-834-00                 | CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP          | 0.022MF<br>0.022MF<br>120PF             | 10%<br>10%<br>10%<br>5%<br>10% | 25V<br>50V<br>50V<br>50V         | C526<br>C527<br>C529<br>C530<br>C531         | 1-124-910-11<br>1-164-232-11<br>1-163-117-00<br>1-163-197-00<br>1-163-113-00                 | ELECT<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP      | 100PF<br>470PF                                     | 20%<br>10%<br>5%<br>5%          | 50V<br>50V<br>50V<br>50V<br>50V          |
| C338<br>C339<br>C340<br>C341         | 1-106-220-00<br>1-106-220-00<br>1-162-568-11<br>1-130-783-00<br>1-106-383-00 | MYLAR<br>CERAMIC CHIP<br>MYLAR  | 0.1MF<br>0.1MF<br>0.33MF<br>0.33MF      | 10%<br>10%<br>10%              | 100V<br>100V<br>16V<br>100V      | 0536<br>0537<br>0540                         | 1-163-117-00<br>1-124-927-11<br>1-163-038-00<br>1-163-111-00<br>1-161-964-61                 | CERAMIC CHIP<br>ELECT<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC           | 0.1MF  | 5%<br>20%<br>5%                 | 50V<br>50V<br>25V<br>50V<br>250V         |
| C344<br>C345<br>C346<br>C347         | 1-163-033-00<br>1-163-037-11<br>1-163-037-11                                 | CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP                          | 0.022MF<br>0.022MF<br>0.022MF           | 10%<br>5%<br>10%<br>10%        | 100V<br>50V<br>50V<br>25V        | C603<br>C604                                 | 1-161-964-61<br>1-162-599-12<br>1-125-318-00<br>1-136-637-11<br>1-106-367-00                 | CERAMIC<br>CERAMIC<br>BLECT (BLOCK)<br>FILM<br>MYLAR                       | 0.0047MF<br>0.0047MF<br>220MF<br>0.047MF<br>0.01MF | 20%<br>10%<br>10%               | 250V<br>250V<br>400V<br>630V<br>400V     |
| C349<br>C352<br>C353<br>C354         | 1-106-375-12<br>1-163-037-11<br>1-163-037-11                                 | CERAMIC CHIP<br>MYLAR<br>CERAMIC CHIP<br>CERAMIC CHIP                 | 0.022MF<br>0.022MF<br>0.022MF           | 10%<br>10%<br>10%<br>10%       | 25V<br>250V<br>25V<br>25V        | 0609<br>  0610                               | 1-161-753-00<br>1-124-347-00<br>1-124-557-11<br>1-102-228-00<br>1-126-101-11                 | CERAMIC<br>BLECT<br>BLECT<br>CERAMIC<br>BLECT                              | 470PF<br>100MF<br>1000MF<br>470PF<br>100MF         | 10%<br>20%<br>20%<br>10%<br>20% | 3KV<br>160V<br>25V<br>500V<br>16V        |
| C356<br>C357<br>C358<br>C359         | 1-163-237-11<br>1-163-031-11<br>1-124-556-11<br>1-163-125-00                 | CERAMIC CHIP<br>CERAMIC CHIP<br>ELECT<br>CERAMIC CHIP                 | 27PF<br>0.01MF<br>2200MF<br>220PF       | 5%<br>20%<br>5%                | 50V<br>50V<br>16V<br>50V         | C618<br>C621 A<br>C623 A                     | . 1-164-246-11<br>1-126-233-11<br>1-136-517-11<br>1-164-246-11<br>1-161-754-00               | ELECT  | 0.0022MF<br>22MF<br>0.22MF<br>0.0022MF<br>0.001MF  | 20%<br>20%<br>20%<br>20%<br>10% | 400V<br>50V<br>300V<br>400V<br>2KV       |
| C361<br>C367<br>C370<br>C388         | 1-163-237-11<br>1-163-031-11<br>1-126-233-11<br>1-106-220-00<br>1-124-910-11 |   | 27FF<br>0.01MF<br>22MF<br>0.1MF         | 20%<br>5%<br>20%<br>10%<br>20% | 50V<br>50V<br>50V<br>100V        | C625 A<br>C626 A<br>C627 A                   | 1-136-517-11<br>1-163-161-91<br>1-163-161-91<br>1-136-559-11<br>1-102-212-00                 | FILM   | 0.22MF   | 20%<br>5%<br>5%<br>10%          | 300V<br>50V<br>50V<br>400V<br>500V       |
| C402<br>C403<br>C404<br>C429         | 1-124-910-11<br>1-102-824-00<br>1-163-031-11<br>1-163-197-00                 | ELECT   | 47MP<br>470PF<br>0.01MF                 | 20%<br>5%<br>10%               | 50V<br>50V<br>50V<br>50V<br>100V | C803<br>C804<br>C805 A                       | 1-102-244-00<br>1-126-101-11<br>1-136-076-11<br>1-108-703-11<br>1-162-116-51                 | CERAMIC<br>ELECT<br>FILM<br>MYLAR  | 220PF<br>100MF<br>0.0085MF<br>0.082MF<br>680PF     | 10%<br>20%<br>3%<br>10%         | 500V<br>16V<br>2KV<br>200V<br>2KV        |
| C431<br>C432<br>C433<br>C434         | 1-124-910-11<br>1-163-031-11<br>1-126-233-11<br>1-163-031-11                 | ELECT<br>CERAMIC CHIP<br>ELECT<br>CERAMIC CHIP                        | 47MF<br>0.01MF<br>22MF<br>0.01MF        | 20%<br>20%                     | 50V<br>50V<br>25V<br>50V         | C808<br>C809<br>C811<br>C812                 | 1-136-932-11<br>1-106-367-00<br>1-136-540-11<br>1-124-634-11                                 | FILM<br>MYLAR<br>FILM<br>ELECT   | 0.82MF<br>0.01MF<br>0.82MF<br>1MF                  | 5%<br>10%<br>5%<br>20%          | 100V<br>400V<br>160V<br>250V             |
| C475<br>C476<br>C499<br>C500<br>C501 | 1-126-233-11<br>1-106-216-00<br>1-163-205-00<br>1-163-109-00<br>1-163-181-00 | ELECT<br>MYLAR<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP        | 47PF<br>100PF                           | 20%<br>10%<br>10%<br>5%<br>5%  | 50V<br>100V<br>50V<br>50V<br>50V | C813<br>C814<br>C815<br>C816<br>C817         | 1-163-009-11<br>1-123-932-00<br>1-126-233-11<br>1-102-228-00<br>1-123-948-00                 | CERAMIC CHIP ELECT ELECT CERAMIC ELECT                                     | 4.7MF<br>22MF<br>470PF<br>22MF                     | 10%<br>20%<br>20%<br>10%<br>20% | 50V<br>160V<br>50V<br>500V<br>250V       |
| C502<br>C503<br>C504<br>C505<br>C506 | 1-163-005-11<br>1-163-181-00<br>1-124-122-11<br>1-126-233-11<br>1-106-228-00 | CERAMIC CHIP<br>CERAMIC CHIP<br>BLECT<br>ELECT<br>MYLAR               | 100PF<br>100MF<br>22MF<br>0.22MF        | 10%<br>5%<br>20%<br>20%<br>10% | 50V<br>50V<br>50V<br>50V<br>100V | C818<br>C819<br>C820<br>C821<br>C822         | 1-106-375-12<br>1-162-114-00<br>1-162-318-11<br>1-126-101-11<br>1-162-318-11                 | MYLAR CERAMIC CERAMIC ELECT CERAMIC  | 0.022MF<br>0.0047MF<br>0.001MF<br>100MF<br>0.001MF | 10%<br>10%<br>20%<br>10%        | 250V<br>2KV<br>500V<br>16V<br>500V       |
| C507<br>C508<br>C509<br>C510<br>C511 | 1-124-557-11<br>1-163-117-00<br>1-162-568-11<br>1-163-081-00<br>1-163-117-00 | ELECT<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP<br>CERAMIC CHIP | 0.33MF<br>0.22MF<br>100PF               | 20%<br>5%<br>10%<br>5%         | 25V<br>50V<br>16V<br>25V<br>50V  | C824<br>C825<br>C826<br>C840                 | 1-126-233-11<br>1-124-913-11<br>1-106-367-00<br>1-137-146-11<br>1-124-902-00                 | ELECT<br>MYLAR<br>FILM<br>ELECT  | 22MF<br>470MF<br>0.01MF<br>0.15MF<br>0.47MF        | 20%<br>20%<br>10%<br>10%<br>20% | 50V<br>50V<br>400V<br>250V<br>50V        |
| C512<br>C513<br>C514<br>C515         | 1-106-216-00<br>1-124-927-11<br>1-136-298-00<br>1-163-035-00                 | MYLAR<br>ELECT<br>FILM<br>CERAMIC CHIP                                | 0.068MF<br>4.7MF<br>0.0033MF<br>0.047MF | 10%<br>20%<br>5%               | 100V<br>50V<br>100V<br>50V       |  | <b>702 30</b>  |  |  | 0                               |  |



| Α | A |  |
|---|---|--|
|---|---|--|

| REF.NO                       | . PART NO.  | DESCRIPTION   | REMARK        | REF.NO.                                   | . PART NO.   | DESCRIPTION  |                       | REMARK |
|------------------------------|---|---|---------------|---|--|--|-----------------------|--------|
| CD101<br>CF501<br>SWF10      | <f] 1-404-801-11="" 1-579-110-11="" 1-579-120-11<="" td=""><td>LTER&gt; DISCRIMINATOR, CERAMIC TRAP, CERAMIC FUTER SUPPACE WAVE</td><td></td><td>D604<br/>D605<br/>D606<br/>D607</td><td>8-719-979-85<br/>8-719-300-33<br/>8-719-980-78<br/>8-719-300-33<br/>8-719-300-33</td><td>DIODE EGP20G<br/>DIODE RU-3AM<br/>DIODE ERA83-<br/>DIODE RU-3AM<br/>DIODE RU-3AM</td><td>006</td><td></td></f]> | LTER> DISCRIMINATOR, CERAMIC TRAP, CERAMIC FUTER SUPPACE WAVE   |               | D604<br>D605<br>D606<br>D607              | 8-719-979-85<br>8-719-300-33<br>8-719-980-78<br>8-719-300-33<br>8-719-300-33 | DIODE EGP20G<br>DIODE RU-3AM<br>DIODE ERA83-<br>DIODE RU-3AM<br>DIODE RU-3AM | 006                   |        |
|                              | <00   | FILTER, CERAMIC  NNECTOR>  PLUG, CONNECTOR (2.5MM PITCH FIN. CONNECTOR 6P   |               | D610<br>D611                              | 8-7:9-303-49   | DIODE R2M  |                       |        |
| CNA21<br>CNA31               | *1-560-290-00<br>*1-568-881-51  | PLUG, CONNECTOR (2.5MM PITCH<br>FIN, CONNECTUR 6P   | 1)            | D801<br>D802                              | 8-719-945-80   | DIODE ERCO6-<br>DIODE EGP20G   | 158                   |        |
| CNA42<br>CNA43<br>CNA61      | *1-565-394-11<br>*1-565-394-11<br>*1-508-765-00   | FIN, CONNECTOR 6P FIN, BOARD TO BOARD CONNECTO FIN, BOARD TO BOARD CONNECTO FIN, CONNECTOR (5MM PITCH) 3 FIN, CONNECTOR (5MM PITCH) 1 FIN, CONNECTOR (5MM PITCH) 6 FLUG (MINIATURE DY) 6P FIN, CONNECTOR (5MM PITCH) 3  | BR<br>BR<br>P | D803<br>D805<br>D806<br>D807              | 8-719-300-33<br>8-719-976-64   | DIODE RU-3AM<br>DIODE RU-3AM<br>DIODE RGPO2-<br>DIODE RU-3AM                 | 17                    |        |
| CNA62<br>CNA64<br>CNA81      | *1-566-664-11<br>*1-508-784-00<br>*1-508-768-00   | PIN, CONNECTUR 4P<br>FIN, CONNECTUR (5MM PITCH) 1<br>FIN. CONNECTUR (5MM PITCH) 6   | P             | D808                                      | 8-719-300-33<br>8-719-911-55   | DIODE RU-3AM   |                       |        |
| CNA82<br>CNA83               | *1-568-536-11<br>*1-508-765-00  | PLUG (MINIATURE DY) 6P<br>PIN, CONNECTOR (5MM PITCH) 3  | P             | D811<br>D820                              | 8-719-911-55   | DIODE U05G<br>DIODE 188119   |                       |        |
|                              |   |   |               | i   | <dei< td=""><td>LAY LINE&gt;</td><td></td><td></td></dei<>                   | LAY LINE>  |                       |        |
| CT332                        | 1-141-418-11  | MMER>   |               | DL301                                     | 1-236-062-11   | MODULE, Y DEL  | AY LINE               |        |
|                              | <d10< td=""><td>DDE&gt;</td><td></td><td>1<br/>1<br/>1</td><td><fus< td=""><td>SE&gt;</td><td></td><td></td></fus<></td></d10<>   | DDE>  |               | 1<br>1<br>1                               | <fus< td=""><td>SE&gt;</td><td></td><td></td></fus<>                         | SE>  |                       |        |
| D002<br>D004<br>D007         | 8-719-920-55<br>4-200-407-01<br>8-719-914-44<br>8-719-400-18  | DIODE SPR-54MVW<br>H3LDER, LED; DOO2<br>DIODE DAP202K<br>DIODE MA152WK  |               | F601 <u>A</u>                             | 1-576-231-21<br>1-533-230-11   | FUSE (H.B.C.)<br>HOLDER, FUSE;   | 4A/250V<br>F601       |        |
| D008<br>D009                 | 8-719-105-82<br>8-719-105-82  | DIODE RD5.IM-B2   |               | 10001                                     | <1C>   |  | /01/                  |        |
| D011<br>D015<br>D020<br>D101 | 8-719-912-20<br>8-719-911-19<br>8-719-911-19<br>8-719-929-08  | CAP, ADJ  DIODE SPR-54MVW HGLDER, LED; DOO2 DIODE DAP202K DIODE MA152WK DIODE RD5.1M-B2  DIODE RD5.1M-B2  DIODE 1SS120 DIODE 1SS119 DIODE 1SS119 DIODE 1SS119 DIODE HZS7.5NB3 DIODE HZS7.5NB3 DIODE HZS7.5NB3 DIODE MA152WK DIODE UZ-5.1BSB DIODE UZ-5.1BSB DIODE UZ-5.1BSB DIODE DAP202K |               | 10001<br>10002<br>10003<br>10004<br>10005 | 8-759-043-86<br>8-749-922-13<br>8-759-805-37<br>8-759-157-40                 | IC ST24C02AB1 IC KEY-COOSV- IC L78LR05D-M IC UPC574J                         | 7010<br>F<br>A        |        |
| D102<br>D103<br>D104<br>D110 | 8-719-929-08<br>8-719-929-08<br>8-719-400-18<br>8-719-010-38  | DIODE HZS7.5NB3<br>DIODE HZS7.5NB3<br>DIODE MAI52WK<br>DIODE UZ-5 IRSB  |               | 1C102<br>1C201<br>1C301                   | 8-759-044-41<br>8-759-502-74<br>8-759-505-39                                 | IC TDA3827/V3 IC TDA7245 IC TDA4660V2  |                       |        |
| D301<br>D302                 | 8-719-914-44  | DIODE DAP202K   |               | 10302                                     | 8-759-521-22   | 1C TDA4650/V4  |                       |        |
| D303<br>D305<br>D306<br>D313 | 8-719-800-76<br>8-719-400-18  | DIODE 1SS226<br>DIODE MA152WK<br>DIODE 1SS226<br>DIODE MA152WK<br>DIODE 1SS226  |               | 10502<br>10601                            | 8-759-515-72<br>8-749-901-65   | IC TDA8304   |                       |        |
| D321<br>D324<br>D333<br>D402 | 8-719-914-44<br>8-719-911-19<br>8-719-109-96  | DIODE RD5.6ES-B2<br>DIODE DAP202K<br>DIODE 1SS119<br>DIODE HZS6.8NB1  |               | 1C801<br>1C802                            | 8-759-945-58<br>8-759-604-39   | 1C RC4558P   |                       |        |
| D403<br>D404                 |   | DIODE HZS6.8NB1 DIODE HZS6.8NB1   |               |   | <jac< td=""><td>&lt;&gt;</td><td></td><td></td></jac<>                       | <>   |                       |        |
| D405<br>D406<br>D410<br>D411 | 8-719-929-12<br>8-719-929-12<br>8-719-109-96<br>8-719-109-96  | DIODE HZS8.2NB3<br>DIODE HZS8.2NB3<br>DIODE HZS6.8NB1<br>DIODE HZS6.8NB1  |               | J401                                      | 1-562-837-11<br>1-561-534-00<br>1-563-500-11                                 | JACK<br>SOCKET 21P<br>JACK BLOCK, PI   | N (L TYPE)            | 2P     |
| D417<br>D418                 | 8-719-914-44  | DIODE DAP202K<br>DIODE DAP202K  |               |   | <c011< td=""><td>.&gt;</td><td></td><td></td></c011<>                        | .>   |                       |        |
| D426<br>D501<br>D503         | 8-719-109-96<br>8-719-300-33<br>8-719-911-19  | DIODE HZS6.8NB1<br>DIODE RU-3AM<br>DIODE ISS119   |               | L102<br>L103                              | 1-408-409-00<br>1-408-399-00   | INDUCTOR INDUCTOR INDUCTOR INDUCTOR INDUCTOR                                 | 10UH<br>10UH<br>1.5UH |        |
| D519                         | 8-719-400-18  | DIODE MA152WK<br>DIODE MA152WK  | <br>          | L106                                      | 1-408-415-00   | INDUCTOR   | 100H<br>33UH          |        |
| 0602                         | 8-719-976-64  | DIODE KBU4JL-6088<br>DIODE RGP02-17<br>DIODE UO5G   | 1             |   |  | INDUCTOR<br>INDUCTOR   | 12UH<br>10UH          |        |



| REF.NO. PART N  | G. DESCRIPTI  | ON<br>   | REMARK | REF.NO.                                   | PART NO.   | DESCRIPTION   | <b>!</b><br>-                           |  | REMARK             |
|---|---|--|--------|---|--|---|---|--|--------------------|
| 1302 1-408-   | 409-00 INDUCTOR<br>419-00 INDUCTOR<br>425-00 INDUCTOR<br>554-11 COLL                                  | 10UH<br>68UH<br>220UH  |        | Q802<br>Q803                              | 8-729-925-64<br>8-729-202-03   | TRANSISTOR E<br>TRANSISTOR 2  | BU508AS2<br>2SD1408-Y                   |  |                    |
| L404 1-408-<br>L405 1-408-  | 397-00 INDUCTOR 200-00 INDUCTOR   | 1011   |        | 18001                                     | < KES  | SISTUR>   | n 1                                     | 5% 1/10W   | 1                  |
| 1406 1-408-<br>1501 1-404-<br>1502 1-408-<br>1506 1-408-                | 417-00 INDUCTOR<br>493-31 CGIL<br>407-00 INDUCTOR<br>411-00 INDUCTOR                                  | 470H<br>6.80H<br>150H  |        | JR002<br>JR003<br>JR004<br>JR005          | 1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 0 0                                     | 7 1/10 k<br>5% 1/10 k<br>5% 1/10 k<br>5% 1/10 k                | )<br>}<br>}        |
| 1801 1-407-<br>1802 1-420-<br>1804 1-459-<br>1805 1-408-<br>1806 1-459- | 365-00 COIL,CHOKE<br>872-00 COIL, AIR<br>856-11 COIL, FERR<br>236-00 INDUCTOR<br>756-12 COIL, HORI    | 1UH 10UH 47UH 6.8UH 150H CORE 1TE 2.7MMH ZONTAL LINEARITY  |        | JR006<br>JR008<br>JR009<br>JR010<br>JR011 | 1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 0 0 0 0 0 0                             | 5% 1/10k<br>5% 1/10k<br>5% 1/10k<br>5% 1/10k<br>5% 1/10k       | <b>;</b><br>)<br>) |
| L807 1-410-<br>L808 1-408-<br>L809 1-407-                               | 067-21 INDUCTOR<br>226-00 INDUCTOR<br>504-00 INDUCTOR   | 4.7MMH<br>82UH<br>10MMH  |        | JR012<br>JR015<br>JR016<br>JR017<br>JR018 | 1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 0 5 6 0 0 6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 | 5% 1/10W<br>5% 1/10W<br>5% 1/10W<br>5% 1/10W<br>5% 1/10W       | )<br>)<br>         |
|   | <variable coil=""></variable>   |  |        | JR019                                     | 1-216-295-00   | METAL GLAZE   | 0 5                                     | 5% 1/10W   | 1                  |
| LV301 1-404-  | 554-11 COIL<br><ic link=""></ic>  |  |        | JR020<br>JR021<br>JR022<br>JR024          | 1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 0 5                                     | 7 1/10W<br>1/10W<br>1/10W<br>1/10W                             | <b>)</b><br>}      |
| PS801 <u>A</u> 1-532-   | 679-91 LINK, IC (   | 1CP-N15) 0.6A  |        | JR026                                     | 1-216-295-00   | METAL GLAZE   | 0 5                                     | % 1/10W<br>% 1/10W   | 1                  |
|   | <transistor></transistor>   |  |        | JR029<br>JR030<br>JR034                   | 1-216-295-00<br>1-216-295-00<br>1-216-295-00                                 | METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE                         | 0 5                                     | % 1/10W<br>% 1/10W<br>% 1/10W                                  | ı                  |
| Q001 8-729-<br>Q003 8-729-<br>Q004 8-729-                               | 230-49 TRANSISTOR<br>901-01 TRANSISTOR<br>230-49 TRANSISTOR   | 2SC2712-YG<br>DTC144EK<br>2SC2712-YG   |        | JR035<br>JR036                            | 1-216-295-00<br>1-216-295-00   | METAL GLAZE METAL GLAZE   | 0 5                                     | % 1/10W<br>% 1/10W<br>% 1/10W                                  |                    |
| Q005 8-729-   | 923-54 TRANSISTOR<br>922-66 TRANSISTOR  | 2SC2410SN  |        | JRU37<br>  JRO38<br>  JRO30               | 1-216-295-00   | METAL GLAZE<br>METAL GLAZE  | 0 5                                     | % 1/10W<br>% 1/10W<br>% 1/10W                                  |                    |
| Q007 8-729-<br>Q009 8-729-<br>Q015 8-729-<br>Q016 8-729-<br>Q017 8-729- | 230-49 TRANSISTOR<br>901-01 TRANSISTOR<br>230-49 TRANSISTOR<br>901-47 TRANSISTOR<br>216-22 TRANSISTOR | 2SC2712-YG DTC144EK 2SC2712-YG DTA143TK 2SC2410SN  2SC2712-YG DTC144EK 2SC2712-YG DTC144EK 2SC2712-YG DTA143EK 2SA1162-G  DTA144EK DTC124EK DTC124EK DTA143EK DTA143EK DTA143EK DTA143EK DTA143EK DTA143EK DTA143EK DTA143EK |        | JR040<br>JR041<br>JR045<br>JR050          | 1-216-295-00<br>1-216-295-00<br>1-216-295-00<br>1-216-295-00                 | METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE             | 0 5 5 0 5 5 0 5 5                       | % 1/10W<br>% 1/10W<br>% 1/10W<br>% 1/10W<br>% 1/10W<br>% 1/10W |                    |
| Q019 8-729-<br>Q020 8-729-<br>Q101 8-729-<br>Q102 8-729-<br>Q103 8-729- | 901-06 TRANSISTOR<br>901-00 TRANSISTOR<br>901-47 TRANSISTOR<br>901-47 TRANSISTOR<br>901-47 TRANSISTOR | DTA144EK<br>DTC124EK<br>DTA143EK<br>DTA143EK<br>DTA143EK<br>DTA143EK   |        | JR099<br>JR101<br>JR102<br>JR103          | 1-216-295-00<br>1-216-296-00<br>1-216-296-00<br>1-216-296-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 0 5<br>0 5<br>0 5<br>0 5                | % 1/10W<br>% 1/8W<br>% 1/8W<br>% 1/8W<br>% 1/8W                |                    |
| Q104 8-729-<br>Q106 8-729-  | 230-49 TRANSISTOR   | 2SC2712-YG   |        | JR104                                     | 1-216-296-00   | METAL GLAZE   | 0 5                                     | % 1/8W<br>% 1/8W   |                    |
| Q107 8-729-<br>Q112 8-729-<br>Q114 8-729-                               | 230-49 TRANSISTOR<br>216-22 TRANSISTOR<br>230-49 TRANSISTOR<br>901-00 TRANSISTOR                      | 25A1162-G<br>25C2712-YG<br>DTC124EK  |        | JR106<br>JR107<br>JR108                   | 1-216-296-00<br>1-216-296-00<br>1-216-296-00<br>1-216-296-00<br>1-216-296-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                               | 0 5<br>0 5<br>0 5<br>0 5<br>0 5         | % 1/8W<br>% 1/8W<br>% 1/8W<br>% 1/8W<br>% 1/8W                 |                    |
| Q115 8-729-<br>Q141 8-729-<br>Q302 8-729-<br>Q303 8-729-<br>Q304 8-729- | 901-00 TRANSISTOR<br>014-99 TRANSISTOR<br>230-49 TRANSISTOR<br>230-49 TRANSISTOR<br>230-49 TRANSISTOR | 2SC2712-YG<br>2SC2712-YG<br>2SA1162-G<br>2SC2712-YG<br>DTC124EK<br>DTC124EK<br>BF959-AMMO<br>2SC2712-YG<br>2SC2712-YG<br>2SC2712-YG  |        | JR110<br>JR111<br>JR112<br>JR116          | 1-216-296-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 0 5:<br>0 5:<br>0 5:<br>0 5:<br>0 5:    | % 1/8W   |                    |
| Q307 8-729-<br>Q310 8-729-<br>Q311 8-729-<br>Q401 8-729-                | 216-22 TRANSISTOR<br>230-49 TRANSISTOR<br>216-22 TRANSISTOR<br>230-49 TRANSISTOR                      | 2SA1162-G<br>2SC2712-YG<br>2SA1162-G<br>2SC2712-YG   |        | JR118<br>JR119<br>JR123<br>JR125          | 1-216-296-00<br>1-216-296-00<br>1-216-296-00<br>1-216-296-00<br>1-216-296-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 0 55<br>0 55<br>0 55<br>0 55<br>0 55    | % 1/8W<br>% 1/8W<br>% 1/8W<br>% 1/8W                           |                    |
| Q457 8-729-<br>Q504 8-729-<br>Q505 8-729-<br>Q601 8-729-<br>Q801 8-729- | 216-22 TRANSISTOR<br>230-49 TRANSISTOR<br>216-22 TRANSISTOR<br>906-74 TRANSISTOR<br>119-80 TRANSISTOR | 2SA1162-G<br>2SC2712-YG<br>2SA1162-G<br>BC637-16<br>2SC2688-LK   |        | JR127<br>JR128                            | 1-216-296-00<br>1-216-296-00<br>1-216-296-00                                 | METAL GLAZE<br>METAL GLAZE  | 0 5%<br>0 5%<br>0 5%                    | ( 1/8W<br>( 1/8W   |                    |



| REF.NO                       | D. PART NO.  |   |                                   |  |  | REMARK | REF.NO.                            | . PART NO.   | DESCRIPTION   | 1                                  |   |                                 | REMARK |
|------------------------------|--|---|-----------------------------------|--|--|--------|------------------------------------|--|---|------------------------------------|---|---------------------------------|--------|
| JR130<br>JR131<br>JR133      | 1-216-296-00<br>1-216-296-00                                 | METAL GLAZE   | 0 0 0                             | 5%<br>5%<br>5%                         | 1/8W<br>1/8W<br>1/8W   |        | R047<br>R048<br>R049               | 1-216-079-00<br>1-216-202-00                                 | METAL GLAZE   |                                    | 5%<br>K 5%                                | 1/10W                           |        |
| JR134<br>JR135<br>JR136      | 1-216-296-00   | METAL GLAZE METAL GLAZE METAL GLAZE                         | 0                                 | 5%<br>5%                               | 1/8W<br>1/8W<br>1/8W   |        | R049<br>R050<br>R051<br>R052       | 1-216-073-00<br>1-216-250-00<br>1-216-295-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE           | 10K                                | 5%<br>< 5%<br>< 5%<br>< 5%                | 1/10W<br>1/8W<br>1/10W          |        |
| JR137<br>JR139               | 1-216-296-00<br>1-216-296-00<br>1-216-296-00                 | METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE METAL GLAZE | 00000                             | 5%<br>5%<br>5%                         | 1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W                         |        |                                    | 1-216-065-00<br>1-216-049-00<br>1-249-395-11<br>1-216-057-00 | METAL GLAZE   | 1K<br>15                           | 5%<br>5%                                  | 1/10W<br>1/10W<br>1/4W          |        |
| JR146<br>JR147               | 1-216-296-00<br>1-216-296-00                                 | METAL GLAZE   | 0                                 | 5%                                     | 178W   |        | 1 KO56<br>1 RO58                   | 1-216-041-00<br>1-249-434-11                                 | METAL GLAZE<br>CARBON                               | 470<br>27K                         | 5%<br>5%                                  | 1/10W<br>1/10W<br>1/4W          |        |
| JR148<br>JR149<br>JR150      | 1-216-296-00   |   |                                   | 5%<br>5%<br>5%                         | 1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W                         |        | R059<br>R060<br>R061               | 1-216-089-00<br>1-216-234-00<br>1-216-079-00<br>1-216-242-00 | METAL GLAZE   | 18K                                | 5%<br>5%                                  | 1/10W<br>1/8W<br>1/10W          |        |
| JR154<br>JR155<br>JR182      | 1-216-296-00<br>1-216-296-00                                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                   | 0<br>0<br>0<br>0                  | 5%<br>5%<br>5%                         | 1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W<br>1/8W |        | R064<br>R075                       | 1-216-091-00<br>1-216-240-00                                 | METAL GLAZE   | 68K<br>56K<br>56K                  | 5%<br>5%<br>5%                            | 1/8W<br>1/10W<br>1/8W           |        |
| JR184<br>R001                | 1-216-296-00<br>1-216-296-00<br>1-216-069-00                 | METAL GLAZE METAL GLAZE METAL GLAZE                         |                                   | 5%<br>5%<br>5%                         | 1/8W<br>1/8W<br>1/10W  |        | R076<br>  R077<br>  R078<br>  R079 | 1-216-198-00<br>1-216-077-00<br>1-216-049-00<br>1-216-049-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE           | 1K<br>15K<br>1K                    | 5%<br>5%<br>5%<br>5%<br>5%                | 1/8W<br>1/10W<br>1/10W          |        |
| R002<br>R003<br>R004<br>R005 | 1-216-081-00<br>1-216-081-00<br>1-216-083-00<br>1-216-206-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE    | 6.8K<br>22K<br>22K<br>27K<br>2.2K | 5%<br>5%<br>5%                         | 1/10W<br>1/10W<br>1/10W<br>1/10W                             |        | i                                  | 1-216-198-00<br>1-216-049-00                                 | METAL GLAZE   | 1 K<br>1 K<br>1 K                  |   | 1/10W<br>1/8W<br>1/10W          |        |
| R006<br>R007                 | 1-216-246-00<br>1-216-190-00                                 | METAL GLAZE<br>METAL GLAZE                                  | 100K<br>470                       | 5%                                     | 1/8W   |        | R087                               | 1-216-065-00<br>1-216-057-00<br>1-216-027-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE           | 4.7K<br>2.2K<br>120                |   | 1/10W<br>1/10W<br>1/10W         |        |
| R008<br>R009<br>R010         | 1-216-049-00<br>1-216-049-00<br>1-216-198-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                   | 1 K<br>1 K<br>1 K                 | 5%<br>5%<br>5%                         | 1/10W<br>1/10W<br>1/10W<br>1/8W                              |        | R094<br>R095<br>R096               | 1-216-077-00<br>1-216-065-00<br>1-216-065-00                 | METAL GLAZE<br>METAL GLAZE                          | 15K<br>4.7K<br>4.7K                | 5%<br>5%                                  | 1/10W<br>1/10W<br>1/10W         |        |
| R011<br>R012<br>R013         | 1-216-077-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                   | 270<br>56K<br>15K                 | 5%<br>5%                               | 1/10W  |        | R099                               | 1-216-085-00<br>1-216-228-00<br>1-216-017-00                 | METAL GLAZE METAL GLAZE METAL GLAZE                 | 33K<br>18K<br>47                   | 5%<br>5%<br>5%                            | 1/10W<br>1/8W<br>1/10W          |        |
| R014<br>R015<br>R016         |  | METAL GLAZE METAL GLAZE METAL GLAZE                         | 398<br>228<br>18                  | 5%<br>5%<br>5%                         | 1/10W<br>1/10W<br>1/8W                                       |        | R101<br>R102<br>R103<br>R104       | 1-216-069-00<br>1-216-061-00<br>1-216-057-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE           | 47<br>6.8K<br>3.3K<br>2.2K<br>2.2K | 5%  | 1/10W<br>1/10W<br>1/10W         |        |
| R017<br>R018<br>R019<br>R020 | 1-216-081-00<br>1-216-065-00                                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                   | 1K<br>22K<br>4.7K<br>4.7K<br>4.7K | 5%<br>5%<br>5%                         | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W                    |        |                                    | 1-216-057-00<br>1-216-109-00<br>1-216-081-00<br>1-216-073-00 | METAL GLAZE   | 330K<br>22K<br>10K                 | 5%<br>5%<br>5%<br>5%                      | 1/10W<br>1/10W<br>1/10W         |        |
| R021<br>R022<br>R023         | 1-216-049-00<br>1-216-198-00                                 | METAL GLAZE   | 1 K                               | 5%                                     | 1/10W  |        | R108                               | 1-216-049-00<br>1-216-190-00                                 | METAL GLAZE<br>METAL GLAZE                          | 1 K<br>470                         | 5%  | 1/10W<br>1/10W<br>1/8W          |        |
| R024<br>R025                 | 1-216-097-00   | HEINL GLAZE   | 1.2K<br>4.7K<br>100K              | 5%<br>5%<br>5%                         | 1/8W<br>1/10W<br>1/10W<br>1/10W                              |        | R110<br>R111<br>R112<br>R113       | 1-249-437-11<br>1-216-085-00<br>1-249-411-11<br>1-216-085-00 | CARBON<br>METAL GLAZE<br>CARBON<br>METAL GLAZE      | 47K<br>33K<br>330<br>33K           | 5%%%%%<br>555555                          | 1/4W<br>1/10W<br>1/4W<br>1/10W  |        |
| R026<br>R028<br>R029<br>R030 | 1-216-085-00<br>1-216-041-00                                 | METAL GLAZE METAL GLAZE METAL GLAZE                         | 47K<br>33K<br>470                 | 5%%%%%%<br>5555555555                  | 1/10W<br>1/10W<br>1/10W                                      | )<br>  | R114<br>R115                       | 1-216-238-00<br>1-216-045-00                                 | METAL GLAZE   | 47K<br>680                         |   | 1/10W<br>1/8W                   |        |
| R031<br>R032                 | 1-216-073-00<br>1-216-057-00                                 | METAL GLAZE METAL GLAZE METAL GLAZE                         | 15K<br>10K<br>2.2K                |  | 1/10W<br>1/10W<br>1/10W                                      | 1      | R118<br>R119                       | 1-216-049-00<br>1-216-035-00<br>1-216-045-00<br>1-249-409-11 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>CARBON | 1K<br>270<br>680<br>220            | 5%%%%%<br>5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% | 1/10W<br>1/10W<br>1/10W<br>1/4W |        |
| R033<br>R034<br>R035<br>R037 | 1-216-057-00<br>1-216-238-00<br>1-216-077-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE    | 2.2K<br>47K<br>15K                | 55555555555555555555555555555555555555 | 1/10W<br>1/8W<br>1/10W                                       |        | R131<br>R132                       | 1-216-041-00<br>1-216-295-00                                 | METAL GLAZE<br>METAL GLAZE                          | 470<br>0                           | 5%<br>5%                                  | 1/10W<br>1/10W                  |        |
| R038<br>R039                 | 1-216-073-00<br>1-216-073-00                                 | METAL GLAZE<br>METAL GLAZE                                  | 10K<br>10K<br>10K                 | 5%%%%%<br>5%%%%%<br>55%%%%             | 1/10W<br>1/10W<br>1/10W                                      | 1      | R138                               | 1-216-057-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE           | 470<br>2.2K<br>0                   | 5%<br>5%<br>5%                            | 1/10W<br>1/10W<br>1/10W         |        |
| R040<br>R041<br>R042         | 1-216-081-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                   | 22K<br>22K<br>22K                 | 5%<br>5%<br>5%                         | 1/10W<br>1/10W<br>1/10W                                      |        | R141<br>R142                       | 1-216-021-00<br>1-216-063-00                                 | METAL GLAZE METAL GLAZE METAL GLAZE                 | 330<br>68<br>3.9K                  | 5%<br>5%                                  | 1/10W<br>1/10W<br>1/10W         |        |
| R043<br>R044<br>R045         | 1-216-105-00<br>1-216-089-00                                 | METAL OXIDE<br>METAL GLAZE<br>METAL GLAZE                   | 22K<br>220K<br>47K                | 5%<br>5%<br>5%                         | 2W<br>1/10W<br>1/10W   |        | R144                               | 1-216-065-00   | METAL GLAZE METAL GLAZE METAL GLAZE                 | 220<br>4.7K<br>10K                 | 5%<br>5%<br>5%                            | 1/10W<br>1/10W<br>1/10W         |        |
| R046                         | 1-216-081-00   | METAL GLAZE   | 22K                               | 5%                                     | 1/10W  | ;      | R148                               |  | METAL GLAZE   | 47                                 | 5%<br>5%                                  | 1/10W                           |        |



| REF.NO.                              | PART NO.   | DESCRIPTION   |                                  |                          |   | REMARK | REF.NO.                              | PART NO.   | DESCRIPTION  |                                       |   |   | REMARK |
|--------------------------------------|--|---|----------------------------------|--------------------------|---|--------|--------------------------------------|--|--|---------------------------------------|---|---|--------|
|                                      | 1-216-182-00<br>1-216-057-00<br>1-216-061-00<br>1-215-867-00<br>1-216-295-00 | METAL GLAZE<br>METAL GLAZE<br>METAL OXIDE<br>METAL GLAZE                | 220<br>2.2K<br>3.3K<br>470<br>0  |                          | 1/8W<br>1/10W<br>1/10W<br>1W<br>1/10W     |        | R403<br>R404<br>R405<br>R406         | 1-216-172-00<br>1-216-023-00<br>1-216-023-00<br>1-216-023-00<br>1-216-226-00 | METAL GLAZE<br>METAL GLAZE   | 82<br>82<br>82<br>82<br>15K           | 5%%<br>5%%                              | 1/8W<br>1/10W<br>1/10W<br>1/10W<br>1/8W           |        |
| R201<br>R202<br>R203<br>R204<br>R205 | 1-216-073-00<br>1-216-057-00<br>1-216-298-00<br>1-247-741-11<br>1-216-083-00 | METAL GLAZE<br>METAL GLAZE<br>CARBON<br>METAL GLAZE                     | 2.2<br>150<br>27K                | 555555<br>55555          | 1/10W<br>1/10W<br>1/10W<br>1/2W<br>1/10W  |        | R407<br>R408<br>R409<br>R411<br>R412 | 1-216-226-00<br>1-216-091-00<br>1-216-023-00<br>1-216-037-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                     | 15K<br>56K<br>82<br>330<br>330<br>330 | 5 555555                                | 1/8W<br>1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W |        |
| R206<br>R207<br>R303<br>R304<br>R305 | 1-216-035-00<br>1-216-298-00<br>1-216-033-00<br>1-216-033-00<br>1-216-033-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 220<br>220<br>220                | 5%%%%<br>5%%%%<br>5%%%   | 1/10W<br>1/10W<br>1/10W<br>1/10W          |        | R414<br>R420<br>R421<br>R423         | 1-216-041-00<br>1-216-182-00<br>1-216-449-11<br>1-216-095-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL OXIDE<br>METAL GLAZE                     | 470<br>220<br>56<br>82K               | 55555555555555555555555555555555555555  | 1/10W<br>1/8W<br>2W<br>1/10W                      |        |
| R306<br>R307<br>R308<br>R309<br>R310 | 1-216-055-00<br>1-216-049-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                               | 1.8K<br>1K                       | 55555                    | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W |        | R425<br>R426<br>R427<br>R428         | 1-216-073-00<br>1-216-033-00<br>1-216-045-00<br>1-216-049-00<br>1-216-073-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                     | 10K<br>220<br>680<br>1K<br>10K        | 5 % % % % % % % % % % % % % % % % % % % | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W         |        |
| R311<br>R312<br>R313<br>R314<br>R315 | 1-216-033-00<br>1-216-047-00   | METAL GLAZE   | 1.2K<br>220<br>220<br>220<br>820 | 55555                    | 1/10W                                     |        | R431<br>R432<br>R433<br>R434         | 1-216-077-00<br>1-216-077-00<br>1-249-403-11<br>1-216-079-00<br>1-216-029-00 | METAL GLAZE<br>CARBON<br>METAL GLAZE<br>METAL GLAZE                          | 15K<br>15K<br>68<br>18K<br>150        | 5%<br>5%%<br>5%%<br>5%%<br>5%%          | 1/10W<br>1/10W<br>1/4W<br>1/10W<br>1/10W          |        |
| R316<br>R317<br>R320<br>R321<br>R322 | 1-216-023-00<br>1-216-053-00   | METAL GLAZE   | 2.2K<br>82<br>1.5K               |                          | 1/10W<br>1/8W<br>1/10W<br>1/10W<br>1/10W  |        | R436<br>R437<br>R501<br>R502         | 1-216-033-00<br>1-216-089-00<br>1-216-085-00<br>1-216-214-00<br>1-247-743-11 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>CARBON                          | 220<br>47K<br>33K<br>4.7K<br>220      | 5%<br>5%<br>5%<br>5%<br>5%              | 1/10W<br>1/10W<br>1/10W<br>1/8W<br>1/2W           |        |
| R323<br>R324<br>R325<br>R326<br>R327 | 1-216-121-00   | METAL GLAZE<br>CARBON<br>METAL GLAZE<br>METAL GLAZE                     | 560<br>4.7K<br>270<br>270<br>1M  | 5%<br>5%<br>5%           | 1/8W<br>1/10W<br>1/4W<br>1/10W<br>1/10W   |        | R504<br>R505<br>R507<br>R508         | 1-249-437-11<br>1-216-017-00<br>1-216-073-00<br>1-216-350-11<br>1-215-867-00 | METAL GLAZE<br>METAL GLAZE<br>METAL OXIDE<br>METAL OXIDE                     | 47<br>10K<br>1.2<br>470               | 5%<br>5%<br>5%                          | 1/4W<br>1/10W<br>1/10W<br>1W<br>1W                | F      |
| R328<br>R329<br>R330<br>R331<br>R332 | 1-216-270-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 10<br>330K<br>82K<br>470K<br>1M  |                          | 1/10W<br>1/10W<br>1/8W<br>1/10W<br>1/8W   |        |                                      | 1-216-061-00<br>1-216-244-00<br>1-216-089-00<br>1-216-053-00<br>1-216-051-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                                    |                                       | 5%                                      | 1/10W<br>1/8W<br>1/10W<br>1/10W<br>1/10W          |        |
| R333<br>R334<br>R335<br>R336<br>R337 | 1-216-091-00<br>1-216-067-00<br>1-216-001-00<br>1-216-059-00<br>1-216-073-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 56K<br>5.6K<br>10<br>2.7K<br>10K | 5%<br>5%<br>5%           | 1/10W<br>1/10W<br>1/10W<br>1/10W          |        | R516<br>R517<br>R518<br>R519         | 1-216-031-00<br>1-216-033-00<br>1-216-049-00                                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                     | 82K<br>180<br>220<br>1K               | 5%<br>5%<br>5%                          | 1/10W<br>1/10W<br>1/10W<br>1/10W                  |        |
| R338<br>R341<br>R342<br>R346<br>R347 | 1-216-073-00<br>1-216-061-00<br>1-216-041-00<br>1-216-037-00<br>1-216-089-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 10K<br>3.3K<br>470<br>330<br>47K | 5%<br>5%<br>5%<br>5%     | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W |        | R520<br>R521<br>R522<br>R523<br>R524 | 1-216-258-00<br>1-216-053-00<br>1-215-863-11<br>1-247-754-11<br>1-216-099-00 | METAL GLAZE METAL GLAZE METAL OXIDE CARBON METAL GLAZE                       | 330K<br>1.5K<br>100<br>1.5K<br>120K   | 5%<br>5%<br>5%                          | 1/8W<br>1/10W<br>1W<br>1/2W<br>1/10W              |        |
| R348<br>R349<br>R350<br>R351<br>R352 | 1-216-033-00<br>1-216-029-00<br>1-216-041-00<br>1-216-043-00<br>1-216-039-00 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 220<br>150<br>470<br>560<br>390  | 5%%<br>5%%<br>5%%<br>5%% | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W |        | R525<br>R527<br>R532<br>R533<br>R534 | 1-216-065-00<br>1-215-869-11<br>1-216-081-00<br>1-216-133-00<br>1-216-069-00 | METAL GLAZE  METAL OXIDE  METAL GLAZE  METAL GLAZE  METAL GLAZE  METAL GLAZE | 4.7K<br>1K<br>22K                     | 555555555555555555555555555555555555555 | 1/10W<br>1W<br>1/10W<br>1/10W<br>1/10W            |        |
| R353<br>R354<br>R355<br>R356<br>R357 | 1-249-438-11<br>1-216-081-00<br>1-216-049-00<br>1-216-041-00<br>1-216-039-00 | CARBON<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE      | 56K<br>22K<br>1K<br>470<br>390   | 5%%%%<br>5%%%%%<br>5%%   | 1/4W<br>1/10W<br>1/10W<br>1/10W<br>1/10W  |        | R535<br>R539<br>R542<br>R543<br>R543 | 1-216-107-00<br>1-216-049-00<br>1-216-025-00<br>1-249-408-11<br>1-216-278-00 | METAL GLAZE METAL GLAZE METAL GLAZE CARBON METAL GLAZE                       | 270K<br>1K<br>100<br>180<br>2.2M      | 5%<br>5%<br>5%                          | 1/1)W<br>1/1)W<br>1/10W<br>1/4V<br>1/8V           |        |
| R360<br>R363<br>R364<br>R399         | 1-216-001-00<br>1-216-222-00<br>1-216-222-00<br>1-216-037-00                 | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE                | 10<br>10K<br>10K<br>330          | 5%<br>5%<br>5%           | 1/10W<br>1/8W<br>1/8W<br>1/10W            |        | R548<br>R601 <b>∧</b>                | 1-216-049-00<br>. 1-205-909-11   | METAL GLAZE WIREWOUND CARBON   | 3.3<br>270K                           | 5%<br>5%<br>5%                          | 1/10W   | F      |

The components identified by shading and mark  $\triangle$  are critical for safety.
Replace only with part number specified.

| REF.NO. PART NO.  | DESCRIPTION   |                                     |   |   | REMARK   | REF.NO                               | . PART NO.   | DESCRIPTION  |                                 | REMARK                           |
|---|---|-------------------------------------|---|---|----------|--------------------------------------|--|--|---------------------------------|----------------------------------|
| R604 1-247-752-1<br>R605 <b>A</b> 1-218-265-9<br>R606 1-212-877-1                                     | 1 CARBON<br>1 METAL GLAZE<br>1 FUSIBLE  | 68K<br>1K<br>8.2M<br>68<br>47       | 55%%%%<br>5555555555555555555555555555555 | 2W<br>1/2W<br>1W:<br>1/4W<br>2W           | t flaves | T601<br>T603<br>T604<br>T605<br>T801 | A. 1-450-217-22<br>A. 1-421-776-21<br>A. 1-424-078-11<br>A. 1-424-391-11<br>1-437-090-00 | S.R.T<br>LFT<br>TRANSFORMER, TRIGGER PL<br>TRANSFORMER, LINE FILTE<br>HDT                                    | ILSE<br>ìR                      |                                  |
| R611 I-214-915-0<br>R612 I-219-137-1<br>R613 I-217-811-1  | O WIREWOUND O CARBON I FUSIBLE I FUSIBLE O METAL GLAZE                              | 0.27<br>120K<br>0.33<br>0.47<br>330 | 10%<br>5%<br>5%<br>5%                     | 2W<br>1/2W<br>1/4W<br>1/4W<br>1/10W       |          |                                      |  | TRANSFORMER ASSY, FLYBA<br>ERMISTOR><br>2 THERMISTOR (POSITIVE)  |                                 |                                  |
| R615  | 1 METAL OXIDE   | 33<br>2.7<br>27K<br>27K<br>1K       | 555555                                    | 1/10W<br>1W<br>2W<br>2W<br>1W             |          | !                                    | V101   | VERS TUNER (BT-3C 301)   |                                 |                                  |
| R802 1-217-826-1<br>R803 1-216-355-1<br>R804 1-216-013-0<br>R805 1-216-065-0<br>R806 1-216-049-0      | 1 METAL OXIDE<br>O METAL GLAZE<br>O METAL GLAZE                                     | 10K<br>3.3<br>33<br>4.7K<br>1K      | 5%<br>5%<br>5%<br>5%                      | 1/4W<br>1W<br>1/10W<br>1/10W<br>1/10W     | F        | X001<br>X332                         | <cr<br>1-577-619-11<br/>1-567-131-00</cr<br>   | YSTAL><br>VIBRATOR, CRYSTAL<br>OSCILLATOR, CRYSTAL   |                                 |                                  |
| R808 1-216-091-0  | O METAL GLAZE | 6.8K<br>56K<br>27K<br>82K<br>120K   | 5%<br>5%<br>5%<br>5%<br>5%                | 1/10W<br>1/10W<br>1/10W<br>1/10W<br>1/10W |          |                                      | *A-1638-008-A  | C BOARD, COMPLETE  | *****                           | ******                           |
| R812 1-215-869-1<br>R813 1-212-877-1<br>R814 1-217-820-1<br>R816 1-247-889-0<br>R817 1-216-071-0      | 1 FUSIBLE<br>O CARBON   | 1K<br>68<br>3.3K<br>270K<br>8.2K    | 55555555555555555555555555555555555555    | 1W<br>1/4W<br>1/4W<br>1/4W<br>1/10W       |          |                                      | < CAF  | COVER (MAIN), CV VOL<br>COVER (REAR LID), CV VO  |                                 |                                  |
| R818 1-202-830-0<br>R819 1-217-811-1<br>R820 1-217-811-1<br>R821 1-216-059-0<br>R822 1-216-204-0      | O METAL GLAZE   | 10K<br>0.47<br>0.47<br>2.7K<br>1.8K | 10%<br>5%<br>5%<br>5%                     | 1/2W<br>1/4W<br>1/4W<br>1/10W<br>1/8W     |          | C702<br>C703<br>C704                 | 1-163-127-00<br>1-163-129-00<br>1-163-005-11   | FILM 0.15MF CERAMIC CHIP 270PF CERAMIC CHIP 270PF CERAMIC CHIP 330PF CERAMIC CHIP 470PF                      | 5%<br>5%<br>10%                 | 250V<br>50V<br>50V<br>50V        |
| R824  | O METAL OXIDE   | 100<br>100<br>22K<br>22<br>470K     | 5%<br>5%<br>5%                            | 1W<br>1/10W<br>1/10W<br>2W<br>1/4W        |          |                                      | 1-163-005-11<br>1-123-947-00<br>1-162-116-00<br>1-136-666-11                             | CERAMIC 680PF<br>FILM 0.01MF   | 10%<br>5%                       | 50V<br>50V<br>250V<br>2KV<br>1KV |
| RV001 1-238-012-1<br>RV331 1-238-012-1<br>RV501 1-238-016-1<br>RV502 1-226-703-1                      | I RES, ADJ, CAR<br>I RES, ADJ, CAR  | BON 1K<br>BON 1K<br>BON 10          | K   |   |          | C710<br>C711<br>C712<br>C713<br>C714 | 1-163-009-11<br>1-163-009-11<br>1-162-318-11   | CERAMIC 0.001MF  | 20%<br>10%<br>10%<br>10%<br>10% | 16V<br>50V<br>50V<br>50V<br>500V |
| RV503 1-238-019-1<br>RV504 1-238-019-1<br>RV505 1-238-009-1<br>RV801 1-238-019-1                      | I RES, ADJ, CAR<br>I RES, ADJ, CAR<br>I RES, ADJ, CAR                               | BON 471<br>BON 471<br>BON 221       | К<br>К<br>О                               |   |          | CNC72<br>CNC73                       | *1-508-786-00<br>*1-560-123-00<br>*1-568-881-51  | NECTOR> PIN, CONNECTOR (5MM PITO<br>PLUG, CONNECTOR (2.5MM)<br>PIN. CONNECTOR 6P<br>PIN, CONNECTOR (5MM PITO | 3P                              |                                  |
| <\$I  | VITCH>  |                                     |   |   | 1        |                                      | <dio< td=""><td>DE&gt;</td><td></td><td></td></dio<>                                     | DE>  |                                 |                                  |
| \$001 1-571-532-2<br>\$002 1-571-532-2<br>\$003 1-571-532-2<br>\$601 \$\( \frac{1}{2} \) 1-571-433-13 | SWITCH, TACTI<br>SWITCH, TACTI  | L                                   | VER)                                      |   | <br>     | D701<br>D702<br>D703<br>D704<br>D705 | 8-719-400-18<br>8-719-400-18<br>8-719-400-18<br>8-719-400-18<br>8-719-400-18             | DIODE MA152WK<br>DIODE MA152WK<br>DIODE MA152WK<br>DIODE MA152WK<br>DIODE MA152WK                            |                                 |                                  |
|   | PARK GAP>   |                                     |   |   |          | D706<br>D707                         | 8-719-911-19<br>8-719-400-18   | DIODE 1SS119<br>DIODE MA152WK  |                                 |                                  |
| SG801 1-519-422-1   | GAP, SPARK  |                                     |   |   |          | D708<br>D709                         | 8-719-400-18<br>8-719-400-18   | DIODE MA152WK<br>DIODE MA152WK   |                                 |                                  |
| <1.1  | RANSFORMER>   |                                     |   |   |          | D710                                 | 8-719-800-76   | DIODE 1SS226   |                                 |                                  |



|                                       | PART NO.  | DESCRIPTION  |  |  |   | REMARK | REF.NO                          | . PART NO.   | DESCRIPTION   |                 | REMARK                          |
|---------------------------------------|---|--|--|--|---|--------|---------------------------------|--|---|-----------------|---------------------------------|
| D711<br>D712                          | 8-719-800-76<br>8-719-800-76  | DIODE ISS226<br>DIODE ISS226   |  |  |   |        |                                 |  | V BOARD, COMPLETE   |                 |                                 |
|                                       | <jac< td=""><td>K&gt;</td><td></td><td></td><td></td><td></td><td>!<br/>!<br/>!</td><td><cap< td=""><td>ACITOR&gt;</td><td></td><td></td></cap<></td></jac<>  | K>   |  |  |   |        | !<br>!<br>!                     | <cap< td=""><td>ACITOR&gt;</td><td></td><td></td></cap<>                     | ACITOR>   |                 |                                 |
| J901                                  | 1-526-819-11  | SOCKET, PICTU  | RE TUB                                   | Е                                      |   |        | C1<br>C2                        | 1-126-101-11<br>1-163-038-00   | ELECT 100MF<br>CERAMIC CHIP 0.1MF   | 20%             | 16V<br>25V                      |
| 0701                                  | <tra< td=""><td>NSISTOR&gt;</td><td>C2712</td><td>vc</td><td></td><td></td><td>C3<br/>C4<br/>C5</td><td>1-124-120-11<br/>1-163-077-00<br/>1-124-120-11</td><td>ELECT 220MF CERAMIC CHIP 0.1MF ELECT 220MF</td><td>20%<br/>20%</td><td>16V<br/>50V<br/>16V</td></tra<> | NSISTOR>   | C2712                                    | vc                                     |   |        | C3<br>C4<br>C5                  | 1-124-120-11<br>1-163-077-00<br>1-124-120-11                                 | ELECT 220MF CERAMIC CHIP 0.1MF ELECT 220MF  | 20%<br>20%      | 16V<br>50V<br>16V               |
| Q701<br>Q702<br>Q703<br>Q704<br>Q705  | 8-729-230-49<br>8-729-230-49<br>8-729-230-49<br>8-729-906-70<br>8-729-906-70  | TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR BF TRANSISTOR BF  | C2712-<br>C2712-<br>C2712-<br>871<br>871 | YG<br>YG                               |   |        | C6<br>C7<br>C8<br>C9<br>C10     | 1-163-038-00<br>1-163-235-11<br>1-163-235-11<br>1-163-235-11<br>1-163-038-00 | CERAMIC CHIP 0.1MF<br>CERAMIC CHIP 22PF<br>CERAMIC CHIP 22PF<br>CERAMIC CHIP 22PF<br>CERAMIC CHIP 0.1MF | 5%<br>5%<br>5%  | 25V<br>50V<br>50V<br>50V<br>25V |
| Q706<br>Q707<br>Q708<br>Q709          | 8-729-906-70<br>8-729-200-17<br>8-729-200-17<br>8-729-200-17  | DIODE 155226 DIODE 155226  K> SOCKET, PICTU  NSISTOR>  TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR BF TRANSISTOR BF TRANSISTOR BF TRANSISTOR BF TRANSISTOR BF TRANSISTOR ST TRANSISTOR 2S TRANSISTOR 2S TRANSISTOR 2S | 871<br>A1091-<br>A1091-<br>A1091-        | 0<br>0<br>0                            |   |        | C11<br>C12<br>C13<br>C14<br>C16 | 1-163-038-00<br>1-163-038-00<br>1-163-038-00<br>1-124-927-11<br>1-163-117-00 | CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF CERAMIC CHIP 0.1MF ELECT 4.7MF CERAMIC CHIP 100PF                 | 20%<br>5%       | 25V<br>25V<br>25V<br>50V<br>50V |
|                                       | <res< td=""><td>ISTOR&gt;</td><td></td><td></td><td></td><td></td><td>C17</td><td></td><td>CERAMIC CHIP 100PF</td><td>5%</td><td>50V</td></res<>  | ISTOR>   |  |  |   |        | C17                             |  | CERAMIC CHIP 100PF  | 5%              | 50V                             |
| JW121<br>R701<br>R702<br>R703<br>R704 | 1-216-296-00<br>1-216-061-00<br>1-216-210-00<br>1-216-045-00<br>1-216-045-00  | METAL GLAZE  | 0<br>3.3K<br>3.3K<br>680<br>680          | 5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% | 1/8W<br>1/10W<br>1/8W<br>1/10W<br>1/10W |        | C23<br>C26<br>C27<br>C28        | 1-124-927-11<br>1-163-038-00<br>1-163-117-00                                 | ELECT 4.7MF CERAMIC CHIP 0.1MF CERAMIC CHIP 100PF CERAMIC CHIP 100PF                                    | 20%<br>5%<br>5% | 50V<br>25V<br>50V<br>50V        |
| R705                                  | 1-216-017-00  | METAL GLAZE  | 47                                       |  | 1/10W                                   |        | C29<br>C32                      | 1-163-117-00<br>1-163-038-00   | CERAMIC CHIP 100PF<br>CERAMIC CHIP 0.1MF  | 5%              | 50V<br>25V                      |
| R706<br>R707<br>R708<br>R709          |   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE   | 47<br>47<br>1K<br>820                    | 5%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% | 1/10W<br>1/10W<br>1/8W<br>1/8W          |        | C33                             | 1-163-038-00   | CERAMIC CHIP O.IMF  |                 | 25V                             |
| R710<br>R711<br>R712<br>R713<br>R714  | 1-247-883-00  | CARBON<br>METAL GLAZE<br>CARBON<br>CARBON<br>METAL GLAZE   | 470<br>3.3K<br>390K<br>150K<br>1K        | 5%<br>5%<br>5%<br>5%                   | 1/4W<br>1/10W<br>1/4W<br>1/4W<br>1/8W   |        |                                 |  | CONNECTOR, BOARD TO BOA<br>CONNECTOR, BOARD TO BOA  |                 |                                 |
| R715                                  | 1-216-198-00  | METAL GLAZE  | 1 K                                      | 5%                                     | 1/8W                                    |        | D1                              |  | DIODE RD5.6M-B2   |                 |                                 |
| R716<br>R717<br>R718<br>R719          |   | METAL GLAZE<br>SOLID<br>SOLID<br>SOLID   | 1K<br>3.3K<br>3.3K                       | 5%                                     | 1/10W<br>1/2W<br>1/2W<br>1/2W           |        | D3<br>D5<br>D6<br>D9            | 8-719-914-44<br>8-719-914-44<br>8-719-400-18                                 | DIODE DAP202K<br>DIODE DAP202K<br>DIODE MA152WK<br>DIODE RD6.8M-B2                                      |                 |                                 |
| R720<br>R721<br>R722                  | 1-216-463-00<br>1-216-463-00<br>1-216-463-00  | METAL OXIDE<br>METAL OXIDE   | 12K<br>12K<br>12K                        | 5%<br>5%                               | 2W<br>2W<br>2W                          |        |                                 | <10>   |   |                 |                                 |
| R723<br>R726                          | 1-249-398-11<br>1-202-719-00  | CARBON<br>SOLID  | 27<br>1 M                                | 5%<br>10%                              | 1/4W }<br>1/2W                          | *      | 1 C2<br>1 C3                    |  | IC SAA5246P/E/M4A<br>IC FCB61C65L-70P   |                 |                                 |
| R727<br>R728<br>R729<br>R731<br>R732  | 1-20 2-838-00<br>1-20 2-842-11<br>1-21 6-349-00<br>1-20 2-719-00<br>1-21 6-262-00   | SOLID<br>SOLID<br>METAL OXIDE<br>SOLID<br>METAL GLAZE  |  | 10%<br>10%<br>5%<br>10%<br>5%          | 1/2W<br>1/2W<br>1W 1<br>1/2W<br>1/8W    | Ç.     | L1<br>L2                        |  | INDUCTOR 3.3UH INDUCTOR 6.8UH   |                 |                                 |
| R734<br>R735                          | 1-21 6-057-00<br>1-21 6-057-00  | METAL GLAZE<br>METAL GLAZE   | 2.2K<br>2.2K                             | 5%<br>5%<br>5%                         | 1/10W<br>1/10W                          |        | L3<br>L4                        | 1-408-407-00<br>1-408-407-00   | INDUCTOR 6.8UH INDUCTOR 6.8UH   |                 |                                 |
| R736                                  | 1-24 9-421-11   | CARBON   | 2.2K                                     | 5%                                     | 1/40                                    |        |                                 | <10 1  | LINK>   |                 |                                 |
|                                       | <var< td=""><td>IABLE RESISTOR</td><td>&gt;</td><td></td><td></td><td></td><td>PS1 Z</td><td><u>1-532-679-91</u></td><td>LINK, IC (ICP-N15) 0.6A</td><td></td><td></td></var<>  | IABLE RESISTOR   | >  |  |   |        | PS1 Z                           | <u>1-532-679-91</u>  | LINK, IC (ICP-N15) 0.6A   |                 |                                 |
| RV701<br>RV702                        | 1-23 7-749-11   | RES, ADJ, CAR<br>RES, ADJ, CAR   | BON 22<br>BON 22                         | 00<br>00                               |   |        |                                 | <tra1< td=""><td>NSISTOR&gt;</td><td></td><td></td></tra1<>                  | NSISTOR>  |                 |                                 |
| RV703<br>RV704                        | 1-23 0-641-11<br>1-23 0-641-11  | RES, ADJ, MET<br>RES, ADJ, MET   | AL GLA<br>AL GLA                         | ZE 2.2<br>ZE 2.2                       | M                                       |        | Q1                              | 8-729-900-53   | TRANSISTOR DTC114EK   |                 |                                 |
|                                       | 1-23 0-798-11   | RES, ADJ, MET  |  |  |   | ****** | Q2<br>Q3<br>Q4<br>Q5            | 8-729-120-28<br>8-729-120-28   | TRANSISTOR 2SD2096-EF<br>TRANSISTOR 2SC1623-L5L6<br>TRANSISTOR 2SC1623-L5L6<br>TRANSISTOR 2SB1295-UL6   |                 |                                 |



The components identified by shading and mark 🛕 are critical for safety.

Replace only with part number specified.

| REF.NO.              | PART NO.   | DESCRIPTION                               |                    |                          |   | REMARK      | iber No                     | PART NO.                                     |  |  | REMARK   |
|----------------------|--|---|--------------------|--------------------------|---|-------------|-----------------------------|--|--|--|----------|
| 46<br>Q7<br>Q9       | 8-729-807-87<br>8-729-807-87   | TRANSISTOR 2 TRANSISTOR 2 TRANSISTOR D    | SB1295<br>SB1295   |                          |   |             | !                           |  |  |  |          |
| Q10<br>Q11           | 8-729-901-01<br>8-729-901-01   | TRANSISTOR D                              | TC144E             | K<br>K                   |   |             |                             | 1-452-094-00                                 | MAGNET, DISK;<br>MAGNET, ROTAT.                    | ING<br>KE (Y14NDA2)<br>IOMM Ø<br>ABLE DISK; 15MM | <b>,</b> |
| JRO1                 |  | SISTOR><br>METAL GLAZE                    | 0                  | 5%                       | 1/10₩                                   |             | 1                           | 1-452-277-00                                 | MAGNET, BMC  |  |          |
| JRO2<br>JRO3<br>JRO8 | 1-216-295-00<br>1-216-295-00   | METAL GLAZE<br>METAL GLAZE                | 0                  | 5%<br>5%                 | 1/10W<br>1/10W                          |             | ₩001 A                      | . 1-575-487-11                               | CORD, POWER (W                                     | ITH NOISE FILTER)                                |          |
|                      |  |   |                    |                          |   |             | *****                       | ##*********                                  | ************                                       | ***************                                  | ******   |
| JRII<br>JRI4<br>JRI5 | 1-216-295-00<br>1-216-296-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 0<br>0<br>0<br>0   | 5%<br>5%<br>5%           | 1/10W<br>1/8W<br>1/8W                   |             | 1                           |  | RIES AND PACKING                                   |  |          |
| JR17                 | 1-216-295-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE                | 0<br>0             | 5%<br>5%                 | 1/10W<br>1/8W                           |             |                             | PART NO.                                     | DESCRIPTION  |  | REMARK   |
| JR19<br>JR20         | 1-216-296-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE                | 0                  | 5%<br>5%                 | 1/8W<br>1/8W                            |             | 1                           |  |  | SFORMER, ANTENNA                                 |          |
| JR21<br>JR23<br>JR24 | 1-216-296-00<br>1-216-295-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 0<br>0<br>0<br>0   | 5%<br>5%<br>5%           | 1/8W<br>1/8W<br>1/8W<br>1/10W<br>1/8W   |             | :<br>:<br>:                 | 1-501-372-21<br>4-200-397-11<br>4-200-423-01 | ANTENNA, TELES<br>MANUAL, INSTRU<br>CUSHION (LOWER | SFORMER, ANTENNA<br>SCOPIC<br>JCTION<br>(ASSY)   |          |
| JR25                 | 1-216-296-00   |   |                    |                          |   |             | <br>                        | *4-200-424-01                                | CUSHION (UPPER                                     | R) (ASSY)  |          |
| JR202<br>JR203       | 1-216-296-00<br>1-216-295-00<br>1-216-295-00   | METAL GLAZE<br>METAL GLAZE                | 0                  | 5%<br>5%                 | 1/8W<br>1/8W<br>1/10W<br>1/10W<br>1/10W |             |                             |  | INDIVIDUAL CAR<br>BAG, PROTECTIO                   |  |          |
| JR221<br>JR222       | 1-216-295-00   | METAL GLAZE                               | 0                  | 5%                       | 1/10W<br>1/10W                          |             | f<br>1<br><del>1</del><br>1 |  | MOTE COMMANDER                                     |  |          |
| R1<br>R2             | 1-218-326-11<br>1-216-214-00   | METAL GLAZE                               | 470<br>4.7K<br>1K  | 5%<br>5%                 | 1/2W<br>1/8W<br>1/10W                   |             | i<br>i<br>i                 | 1-465-562-12<br>4-035-049-01                 | CONTROL UNIT,<br>COVER, BATTERY                    | REMOTE (RM-694)<br>'(FOR RM-694)                 |          |
| R4                   | 1-216-025-00   | METAL GLAZE                               | 100                | 5%<br>5%                 | 1/10W                                   |             | !<br>[<br> <br>             |  |  |  |          |
| R6<br>R7             | 1-216-047-00<br>1-216-001-00<br>1-216-083-00   | METAL GLAZE                               | 820<br>10<br>27K   |                          | 1/10W<br>1/10W<br>1/10W                 |             |                             |  |  |  |          |
| R8                   | 1-216-071-00   |   | 8.2K<br>4.7        | 5%<br>5%                 | 1/10W<br>1/10W                          |             |                             |  |  |  |          |
| RII                  | 1-218-325-11<br>1-218-325-11   | METAL GLAZE                               | 120<br>120         | 5%<br>5%                 | 1/4W<br>1/4W                            |             |                             |  |  |  |          |
| R13                  | 1-218-325-11<br>1-216-025-00<br>1-216-001-00   | METAL GLAZE                               | 120<br>100<br>10   | 5%%<br>5%%<br>5%%<br>5%% | 1/4W<br>1/10W<br>1/10W                  |             |                             |  |  |  |          |
| R15                  | 1-216-013-00<br>1-216-013-00   | METAL GLAZE<br>METAL GLAZE                | 33<br>33           | 5%                       | 1/10W<br>1/10W                          |             |                             |  |  |  |          |
| R17<br>R18           | 1-216-013-00<br>1-216-025-00   | METAL GLAZE<br>METAL GLAZE                | 33<br>100          | 5%<br>5%<br>5%           | 1/10W<br>1/10W                          |             |                             |  |  |  |          |
| R21                  | 1-216-025-00<br>1-216-013-00   | METAL GLAZE METAL GLAZE                   | 100<br>33          |                          | 1/10W<br>1/10W                          | 1           |                             |  |  |  |          |
| R23                  | 1-216-168-00<br>1-216-214-00<br>1-216-065-00   | METAL GLAZE<br>METAL GLAZE<br>METAL GLAZE | 56<br>4.7K<br>4.7K | 5%<br>5%<br>5%           | 1/8W<br>1/8W<br>1/10W                   | <br>        |                             |  |  |  |          |
| R42                  | 1-216-049-00   | METAL GLAZE                               | 3 K                | 5%                       | 1/10W                                   | (<br>)<br>! |                             |  |  |  |          |
|                      | 1-216-049-00<br>1-216-296-00   | METAL GLAZE<br>METAL GLAZE                | 1 K<br>0           | 5%<br>5%                 | 1/10W<br>1/8W                           | 1           |                             |  |  |  |          |
|                      | <var< td=""><td>IABLE RESISTOR</td><td>&gt;</td><td></td><td></td><td>i<br/> <br/> </td><td></td><td></td><td></td><td></td><td></td></var<> | IABLE RESISTOR                            | >                  |                          |   | i<br> <br>  |                             |  |  |  |          |
| RVI                  | 1-238-012-11   | RES, ADJ, CAR                             | BON IK             |                          |   | !           |                             |  |  |  |          |
|                      | <crys< td=""><td>STAL&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></crys<>                      | STAL>                                     |                    |                          |   |             |                             |  |  |  |          |
| X1                   | 1-579-266-31   | CRYSTAL VIBRA                             | TOR                |                          |   |             |                             |  |  |  |          |

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